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# Facts AND Figures

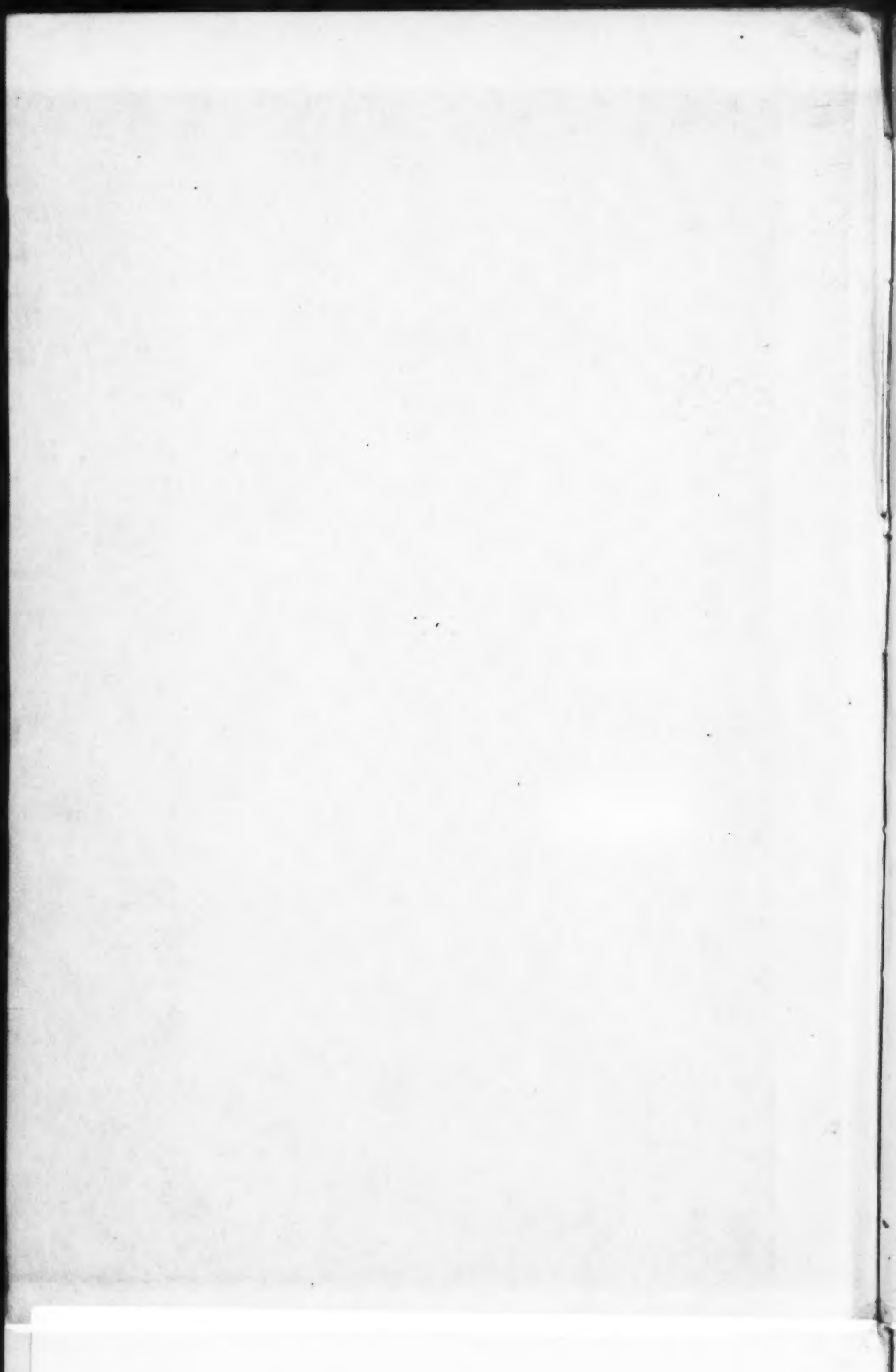


of the

# Automobile Industry

National Automobile  
Chamber of Commerce

1926 EDITION



## INTRODUCTION

This is the seventh annual edition of "Facts and Figures of the Automobile Industry."

Outstanding among the developments of the past year is the fact that countries abroad bought more than a half million motor vehicles, a gain of 39% over 1924.

Foreign lands now have but 19% of the total world registration, and their demand for motor transport is growing rapidly. Motor vehicle factories are busy all over the world, and at the same time American exports are increasing each month.

This annual review aims to present in ready reference form essential data on the development and present standing of motor transportation, including such topics as:

Production	Legislative Principles	Employment
Registration	Taxation	Allied Industries
Rail use of motor vehicles	Traffic (Shipping)	Bus Growth
Farm use of cars and trucks	Traffic (Highway)	Electric Vehicles
Foreign Trade	Safety	Employment
Highways	Finance	Capital Invested

The National Automobile Chamber of Commerce, which publishes this booklet, is the trade association of car and truck manufacturers. With its predecessor association it has represented the automobile industry for 26 years.

Its purpose is to serve as a clearing' house of research and information on subjects concerning motor transportation, to promote the sale and use of cars, and to represent the automobile industry in all matters where co-operative effort is proper, efficient and economical.

Its activities in such matters as standardization and in cross-licensing more than 700 patents have made for a better product and reduced manufacturing costs, with resulting savings to its members and the public.

### NATIONAL AUTOMOBILE CHAMBER OF COMMERCE MARLIN-ROCKWELL BUILDING

366 MADISON AVENUE, AT 46TH STREET, NEW YORK CITY

Detroit Washington, D.C.  
General Motors Bldg. Cable Address: Nautomerce Transportation Bldg.

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*Garford B. this car outside*

## 1925 FOREIGN TRADE

MOTOR VEHICLE EXPORTS.....536,741

Motor Cars.....430,861

Trucks.....105,880

PER. CENT OF PRODUCTION  
SHIPPED ABROAD.....12%

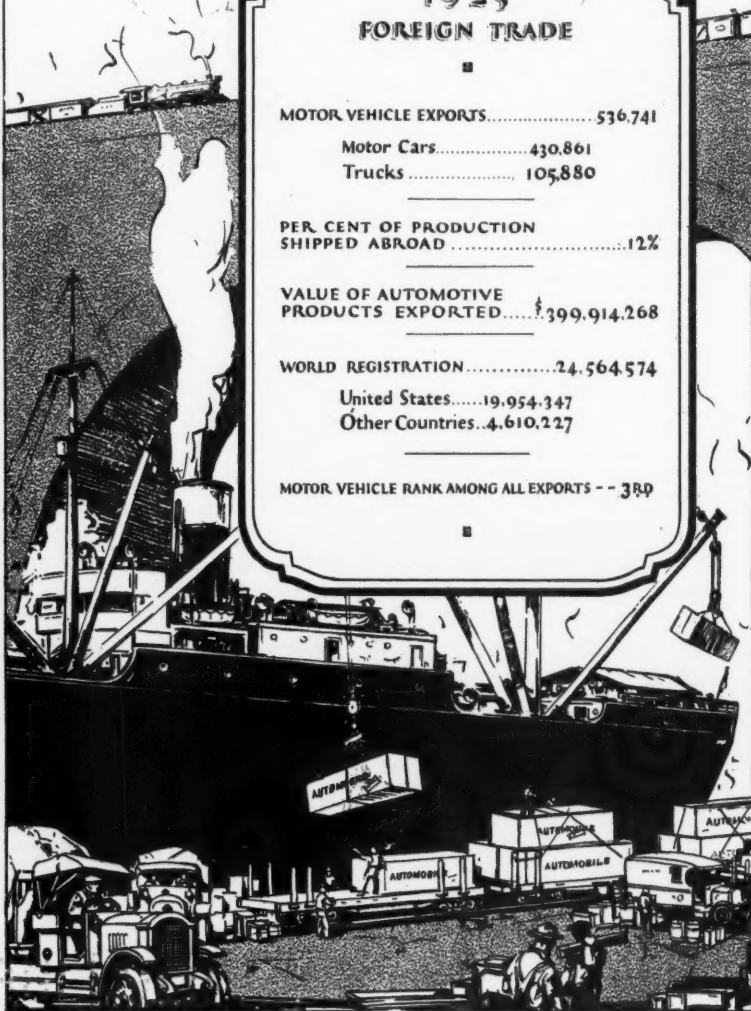
VALUE OF AUTOMOTIVE  
PRODUCTS EXPORTED.....\$399,914,268

WORLD REGISTRATION.....24,564,574

United States.....19,954,347

Other Countries..4,610,227

MOTOR VEHICLE RANK AMONG ALL EXPORTS -- 3RD





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1925

1926 c.1

*in the***Automobile Industry****Production (U. S. and Canada)..... 4,336,754**

Number cars..... 3,839,302

Number trucks..... 497,452

Open cars..... 1,676,171

Closed cars..... 2,163,131

Per cent closed..... 56%

**Wholesale Value, Motor Vehicles and Parts... \$4,210,174,963**

Cars..... \$2,523,642,558

Trucks..... 454,262,275

Parts sold by motor vehicle manufacturers..... 308,830,130

Replacement parts and tires..... 923,440,000

**Exports of Motor Vehicles (U. S. and Canada) 536,741****Registration (U. S.)..... 19,954,347**

Cars..... 17,512,638

Trucks..... 2,441,709

**Motor Vehicle Manufacturing Business (U. S.)**

Capital invested (tangible assets)..... \$1,888,028,810

Wages and salaries..... 649,668,829

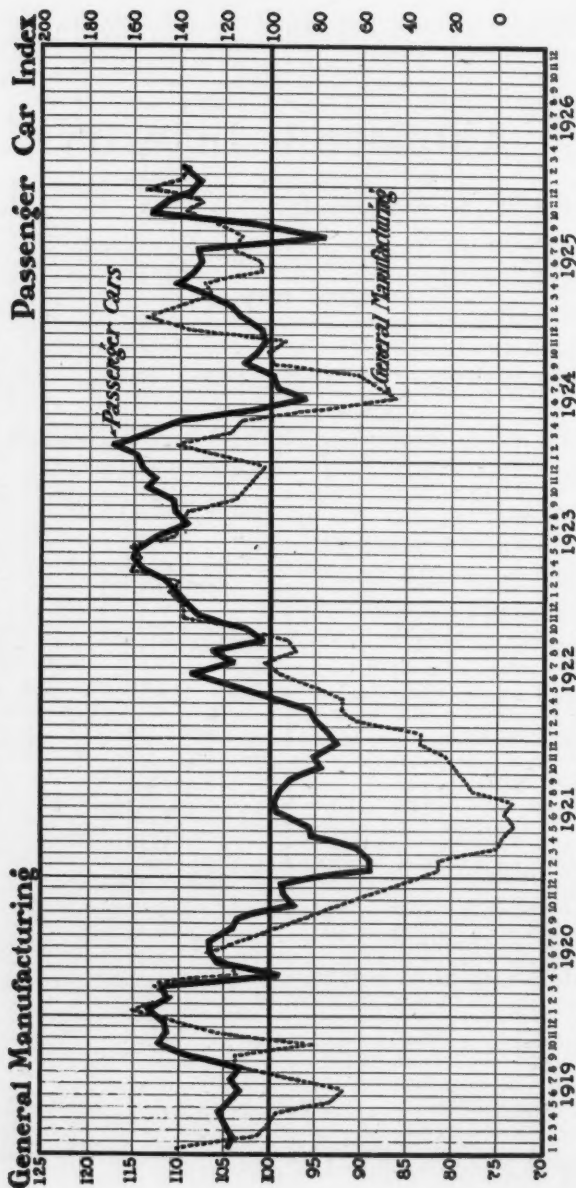
Number employed in car and truck factories..... 361,442

Number employed directly in the industry..... 3,204,442

Number employed directly and indirectly..... 3,445,642

**Number of Motor Vehicle Dealers..... 48,555**

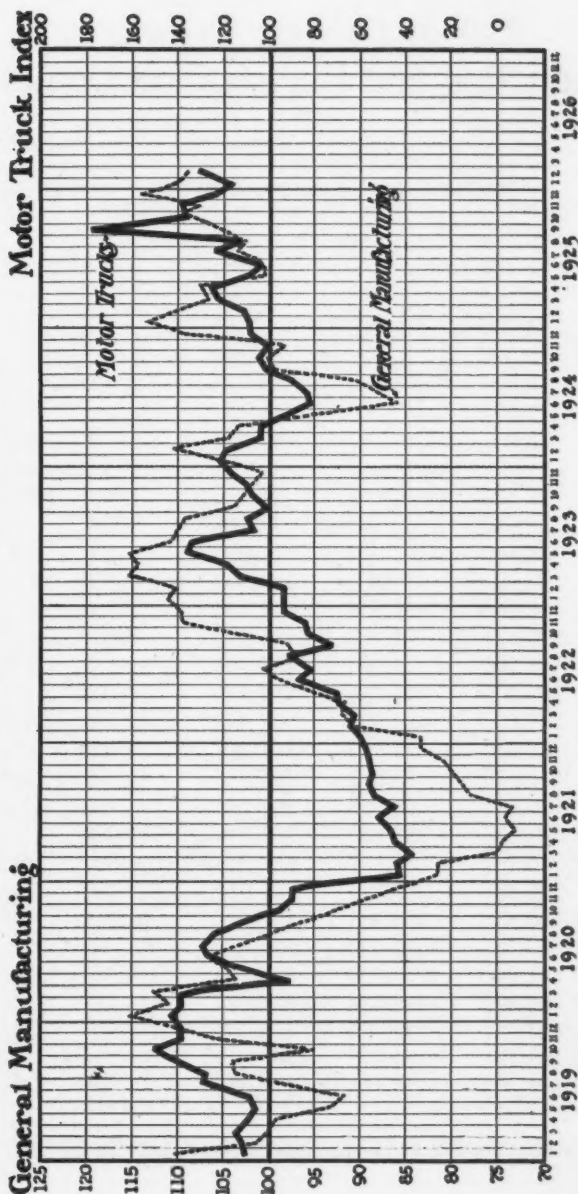
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General manufacturing curve by courtesy Harvard Committee on Economic Research.

The factors of growth and seasonal variation have been computed and eliminated from the passenger car curve. Normal growth was computed to be 2000 cars a month. For figures on the seasonal element see page 9.

# Motor Truck Production Compared with General Manufacturing



General manufacturing curve by courtesy of Harvard Committee on Economic Research.

Seasonal variation and secular trend or growth factor have been eliminated from the truck curve. Secular trend was computed to be a normal increase of 170 trucks per month. The seasonal indices are shown on page 9.

## Car and Truck Growth in Production and Registration Compared

	PRODUCTION		REGISTRATION		PER CENT Gain in Car and Truck PRODUC- TION	PER CENT Gain in Car and Truck REGIS- TRATION
	Passenger Cars	Trucks	Passenger Cars	Trucks		
1895	4	.....	4	.....	.....	.....
1896	25	.....	16	.....	.....	.....
1897	100	.....	90	.....	.....	.....
1898	1,000	.....	800	.....	.....	.....
1899	2,500	.....	3,200	.....	.....	.....
1900	5,000	.....	8,000	.....	.....	.....
1901	7,000	.....	14,800	.....	40%	85%
1902	9,000	.....	23,000	.....	29%	55%
1903	11,235	.....	32,920	.....	25%	43%
1904	22,419	411	54,590	410	100%	67%
1905	24,550	450	77,400	600	11%	42%
1906	33,500	500	105,900	1,100	36%	37%
1907	43,300	700	140,300	1,700	30%	33%
1908	63,500	1,500	194,400	3,100	48%	39%
1909	127,731	3,255	305,950	6,050	100%	58%
1910	181,000	6,000	458,500	10,000	43%	50%
1911	199,319	10,655	619,500	20,000	12%	36%
1912	356,000	22,000	902,600	41,400	82%	48%
1913	461,500	23,500	1,194,262	63,800	28%	33%
1914	543,679	25,375	1,625,739	85,600	18%	36%
1915	818,618	74,000	2,309,666	136,000	57%	43%
1916	1,525,578	92,130	3,297,996	215,000	81%	44%
1917	1,740,792	128,157	4,657,340	326,000	15%	42%
1918	926,388	227,250	5,621,617	525,000	-38%	23%
1919	1,657,652	316,364	6,771,074	794,372	71%	23%
1920	*1,883,158	*322,039	8,225,859	1,006,082	12%	22%
1921	*1,514,000	*147,550	9,346,195	1,118,520	-25%	13%
1922	*2,406,396	*252,668	10,864,128	1,375,725	60%	17%
1923	*3,694,237	*392,760	13,479,608	1,612,569	53%	23%
1924	*3,243,285	*374,317	15,460,649	2,134,724	-11%	17%
1925	*3,839,302	*497,452	17,512,638	2,441,709	20%	14%

\*Includes Canadian Production. For Canadian production given separately, see page 14.

# Annual Production of Motor Vehicles

## TOTAL CARS AND TRUCKS

Year	Number	Wholesale Value	Year	Number	Wholesale Value
*1899.....	4,192	\$4,899,443	*1914....	569,054	458,957,843
1903.....	11,000	12,650,000	1915....	892,618	691,778,950
*1904.....	22,830	24,629,439	1916....	1,617,708	1,088,028,273
1905.....	25,000	40,000,000	†1917....	1,868,949	1,274,488,449
1906.....	34,000	62,900,000	†1918....	1,153,638	1,236,106,917
1907.....	44,000	93,400,000	1919....	1,974,016	1,885,112,546
1908.....	65,000	137,800,000	§1920....	2,205,197	2,232,927,628
*1909.....	130,986	165,148,529	§1921....	1,661,550	1,260,000,000
1910.....	187,000	225,000,000	§1922....	2,659,064	1,789,638,365
1911.....	210,000	262,500,000	§1923....	4,086,997	2,587,543,704
1912....	378,000	378,000,000	§1924....	3,617,602	2,328,066,004
1913 ...	485,000	\$443,902,000	§1925....	4,336,754	2,977,904,833

## PASSENGER CARS

Year	Number	Wholesale Value
*1899.....	4,192	\$4,899,443
*1904.....	22,419	23,682,492
*1909.....	127,731	159,918,506
1910.....	181,000	213,000,000
1911.....	199,319	240,770,000
1912.....	356,000	335,000,000
1913.....	461,500	399,902,000
*1914.....	543,679	413,859,379
1915.....	818,618	565,978,950
1916.....	1,525,578	921,378,000
†1917.....	1,740,792	1,053,505,781
†1918.....	926,388	801,937,925
1919.....	1,657,652	1,461,785,925
§1920.....	1,883,158	1,809,170,963
§1921.....	1,514,000	1,093,918,000
§1922.....	2,406,396	1,567,003,041
§1923.....	3,694,237	2,276,399,270
§1924.....	3,243,285	2,011,038,288
§1925.....	3,839,302	2,523,642,558

## MOTOR TRUCKS

Year	Number	Wholesale Value
*1904....	411	\$946,947
*1909....	3,255	5,230,023
1903-1910	10,374	20,485,500
1911....	10,655	22,292,321
1912....	22,000	43,000,000
1913....	23,500	44,000,000
*1914....	25,375	45,098,464
1915....	74,000	125,800,000
1916....	92,130	166,650,273
†1917....	128,157	220,982,668
†1918....	227,250	434,168,992
1919....	316,364	423,326,621
§1920....	322,039	423,756,715
§1921....	147,550	166,082,000
§1922....	252,668	222,635,324
§1923....	392,760	311,144,434
§1924....	374,317	317,027,716
§1925....	497,452	454,262,275

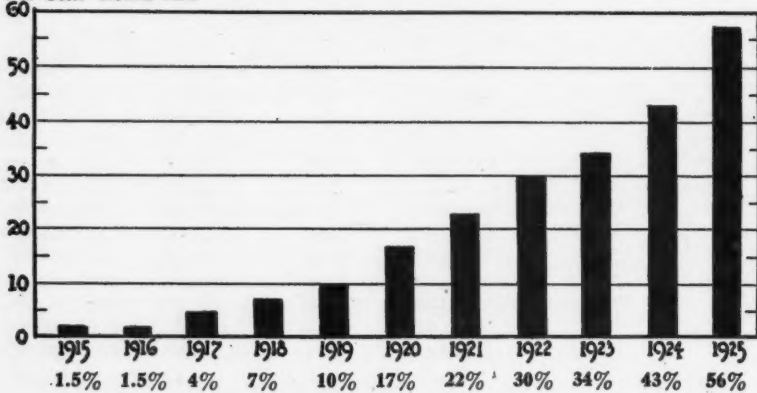
\*—From U. S. Census reports. 1899 for fiscal year ended June 30, 1900.

†—Production figures compiled by Automotive Products Section, War Industries Board, from sworn statements by manufacturers.

—Figures include production of plants located in Canada, making motor vehicles of U. S. design.

## Per Cent Closed Models by Years

Per Cent - Closed Cars



### Closed and Open Car Production—(U. S. and Canada)

Year	Open	Closed	% Closed	Year	Open	Closed	% Closed
1919....	1,496,652	161,000	10.3%	1923....	2,434,360	1,259,877	34.0%
1920....	1,563,022	320,136	17.0%	1924....	1,845,803	1,397,482	43.0%
1921....	1,179,000	335,000	22.1%	1925....	1,676,171	2,163,131	56.5%
1922....	1,691,368	715,028	30.0%				

### MONTHLY CAR AND TRUCK PRODUCTION—United States and Canada

(Figures from U. S. Department of Commerce)

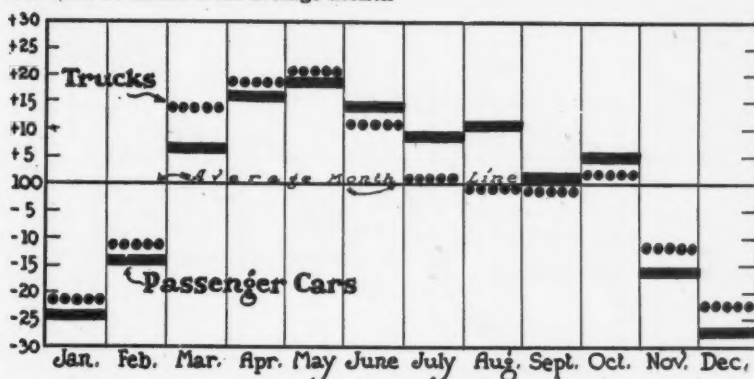
1922	Cars	Trucks	Total	1924	Cars	Trucks	Total
Jan....	84,823	9,597	94,420	Jan....	293,824	30,785	324,609
Feb....	111,843	13,455	125,298	Feb....	343,460	32,974	376,534
Mar....	162,203	20,079	182,282	Mar....	357,045	36,506	393,551
Apr....	208,543	22,613	231,156	Apr....	346,405	38,037	384,442
May....	244,634	24,293	268,927	May....	286,324	35,408	321,732
June....	263,127	27,030	290,157	June....	225,079	29,135	254,214
July....	230,554	22,636	253,190	July....	244,544	26,448	270,992
Aug....	253,133	25,044	278,177	Aug....	255,232	28,714	283,946
Sept....	191,156	20,258	211,414	Sept....	265,528	32,015	295,543
Oct....	217,032	22,683	239,715	Oct....	260,881	32,533	293,414
Nov....	218,100	22,813	240,913	Nov....	204,343	27,956	232,299
Dec....	212,679	20,933	233,612	Dec....	182,099	27,596	209,695
Total..	2,397,827	251,434	2,649,261	Total..	3,262,764	378,106	3,640,870

1923	Cars	Trucks	Total	1925	Cars	Trucks	Total
Jan....	229,226	20,534	249,760	Jan....	213,851	28,202	242,053
Feb....	260,881	23,143	284,024	Feb....	253,955	34,481	288,436
Mar....	332,157	35,016	367,173	Mar....	334,214	45,179	379,393
Apr....	349,474	38,640	388,114	Apr....	393,262	47,983	441,245
May....	360,743	44,125	404,868	May....	384,548	45,718	430,266
June....	346,059	40,639	386,698	June....	366,510	38,150	404,660
July....	305,795	30,139	335,934	July....	360,124	41,870	401,994
Aug....	320,700	30,335	351,035	Aug....	223,517	37,849	261,366
Sept....	304,087	28,160	332,247	Sept....	274,227	60,482	334,709
Oct....	338,664	30,238	368,902	Oct....	408,017	46,012	454,029
Nov....	289,553	28,639	318,192	Nov....	337,435	40,048	377,483
Dec....	281,825	28,680	310,505	Dec....	286,141	34,487	320,628
Total..	3,719,164	378,288	4,097,452	Total..	3,835,801	500,461	4,336,262

# Seasonal Variation in Production of Cars and Trucks

Per cent deviation from average month



Cars	75.5	85.6	107.8	116	119	114	109.6	111	100.2	105	84.1	72.4
Trucks	78.5	88	114.3	118.8	120.8	111.4	101	99.7	99.5	102.5	87.5	77.2

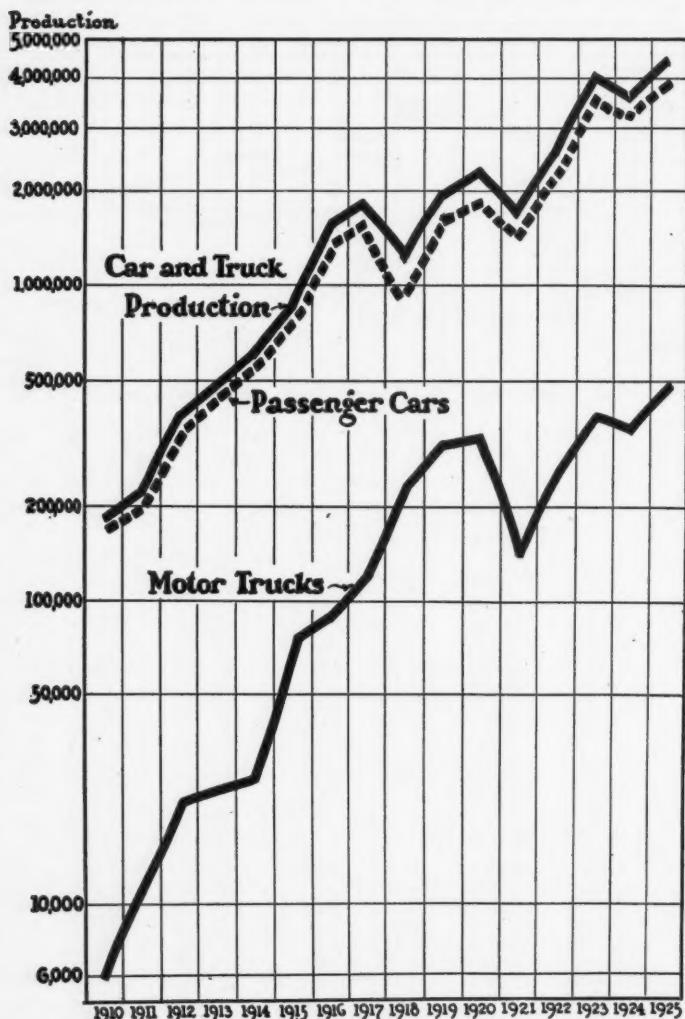
## UNITED STATES PRODUCTION

(Figures from U. S. Department of Commerce)

1922	Cars	Trucks	Total	1924	Cars	Trucks	Total
Jan....	80,194	9,176	89,370	Jan....	283,983	29,038	313,021
Feb....	104,936	12,939	117,875	Feb....	331,388	31,295	362,683
Mar....	152,311	19,433	171,744	Mar....	341,851	34,466	376,317
Apr....	197,903	21,781	219,684	Apr....	331,957	36,104	368,061
May....	232,439	23,464	255,903	May....	271,033	33,655	304,688
June....	252,704	26,384	279,088	June....	214,322	28,185	242,507
July....	223,823	22,175	245,998	July....	235,925	25,341	261,266
Aug....	246,867	24,436	271,303	Aug....	249,796	27,834	277,630
Sept....	184,485	19,812	204,297	Sept....	256,940	30,663	287,603
Oct....	211,164	22,047	233,211	Oct....	254,524	31,263	285,787
Nov....	210,955	22,229	233,184	Nov....	198,381	26,875	225,256
Dec....	205,142	20,409	225,551	Dec....	174,899	25,906	200,805
<b>Total..</b>	<b>2,302,923</b>	<b>244,285</b>	<b>2,547,208</b>	<b>Total..</b>	<b>3,144,999</b>	<b>360,625</b>	<b>3,505,624</b>
1923	Cars	Trucks	Total	1925	Cars	Trucks	Total
Jan....	219,885	19,745	239,630	Jan....	205,550	26,637	232,187
Feb....	249,971	22,014	271,985	Feb....	243,176	32,788	275,964
Mar....	318,415	33,634	352,049	Mar....	321,200	43,090	364,290
Apr....	335,143	37,023	372,166	Apr....	377,747	46,407	424,154
May....	344,038	42,129	386,167	May....	366,197	43,830	410,027
June....	332,760	39,023	371,783	June....	352,261	36,356	388,617
July....	295,320	28,732	324,052	July....	348,984	40,025	389,009
Aug....	311,958	28,721	340,679	Aug....	216,087	36,363	252,450
Sept....	295,815	26,815	322,630	Sept....	263,855	58,002	321,857
Oct....	330,700	28,799	359,499	Oct....	394,096	44,322	438,418
Nov....	281,951	27,070	309,021	Nov....	328,694	37,811	366,505
Dec....	273,980	27,373	301,353	Dec....	278,643	32,756	311,399
<b>Total..</b>	<b>3,589,936</b>	<b>361,078</b>	<b>3,951,014</b>	<b>Total..</b>	<b>3,696,490</b>	<b>478,387</b>	<b>4,174,877</b>



## Growth in Motor Vehicle Production



Only twice has the output of trucks been lower than that in the preceding year. Passenger car production fell below the output in the preceding year but three times, in 1918 on account of the war, in 1921 a year of general industrial depression and in 1924 also a year of lowered general business.



# Automobile Industry First

## Largest of the Country's Manufactures

(Census of Manufactures 1923, latest year for which comparative figures are available)

Industry	Wholesale Value 1923	Industry	Wholesale Value 1923
1. Motor Vehicles.....	\$3,163,327,874	7. Lumber and Timber Products.....	\$1,494,259,321
2. Steel Works and Rolling Mills.....	3,154,324,671	8. Electrical Machinery, Appliances and Supplies.....	1,293,001,751
3. Slaughtering and Meat Packing.....	2,585,803,888	9. Printing and Publishing.....	1,268,501,566
4. Foundry and Machine Shop Products.....	2,337,807,997	10. Bread and Other Bakery Products.....	1,122,834,099
5. Cotton Goods.....	1,901,125,703		
6. Petroleum Refining...	1,793,700,087		

## Truck Production by Capacities—Per Cent

(U. S. and Canada)

SIZE	1919 Percent	1920 Percent	1921 Percent	1922 Percent	1923 Percent	1924 Percent	1925 Percent
¾ ton or less..	21.0	19.0	22.9	24.5	11.3	10.8	9.5
1 ton.....	47.0	51.0	54.1	58.5	70.1	71.4	70.6
1½ ton.....	8.5	11.0	4.8	2.8	7.7	7.7	8.8
2 ton.....	10.0	8.0	7.6	5.5	3.8	2.2	2.5
2½ ton.....	5.5	4.0	2.7	4.5	3.2	3.8	3.3
3½ ton.....	3.8	4.0	2.3	1.3	1.7	1.0	1.2
5 ton.....	2.9	2.0	3.2	2.3	1.2	1.8	1.6
Over 5 ton and spec.....	1.3	1.0	2.4	.6	1.0	1.3	*2.5
Total.....	100%	100%	100%	100%	100%	100%	100%

## Truck Production by Capacities—Number

(U. S. and Canada)

SIZE	1919 Number	1920 Number	1921 Number	1922 Number	1923 Number	1924 Number	1925 Number
¾ ton or less..	66,436	61,187	33,809	62,194	44,198	40,324	47,135
1 ton.....	148,691	164,240	79,844	147,796	275,343	267,790	351,566
1½ ton.....	26,891	35,424	7,076	7,134	30,249	28,946	43,649
2 ton.....	31,636	25,763	11,206	13,830	14,998	8,118	12,298
2½ ton.....	17,400	12,871	3,958	11,247	12,519	14,105	16,478
3½ ton.....	12,022	12,893	3,343	3,319	6,761	3,526	5,958
5 ton.....	9,175	6,441	4,714	5,718	4,611	6,548	7,887
Over 5 ton and spec.....	4,113	3,220	3,600	1,430	4,081	4,960	*12,481
Total.....	316,364	322,039	147,550	252,668	392,760	374,317	497,452

\*Including units not previously segregated.

# Automotive Freight Exceeds 3,000,000 Carloads in 1925

Commodity	1925 Freight Carloads
Motor vehicles and parts.....	832,713
Gasoline.....	796,000
Tires.....	55,000
Lubricating oil.....	34,700
Iron and steel.....	110,000
Coal.....	83,000
Crude oil.....	78,000
Lumber.....	56,200
Crude rubber.....	13,400
Asphalt for roads.....	36,500
Cement.....	162,000
Gravel, sand, etc. for roads.....	720,000
Miscellaneous, such as non-ferrous metals, upholstery materials, paints, plate glass.....	62,487

**Total Automotive Freight..... 3,040,000**

NOTE—No attempt has been made to estimate the number of freight carloads resulting from shipments of following items: Road building machinery, materials and equipment used in automobile factory and branch construction and maintenance, garages, coal for making electricity and gas, fuel oil, iron ore and other ores, and extensive l. c. l. freight and express shipments of accessories and repair parts. There is also the passenger business and freight of all kinds incidental to the increase in population in the automobile and parts manufacturing centers.

## Motor Vehicles and Parts Third Largest Railroad Shipments of Manufactured Articles, 1925

(Figures from Interstate Commerce Commission)

	Carloads		Carloads
1. Refined Petroleum and its products inc. gasoline...	1,636,503	7. Chemicals and explosives.	316,365
2. Bar and Sheet Iron, Structural iron, and iron pipe.....	917,935	8. Castings, machinery and boilers.....	272,889
3. Automobiles, trucks and parts.....	832,713	9. Iron, pig and bloom....	286,842
4. Cement.....	647,661	10. Lime and plaster.....	270,793
5. Brick and artificial stone.	544,343	11. Ice.....	192,423
6. Fertilizers (all kinds)....	363,541	12. Agricultural implements and vehicles other than automobiles.....	153,085

## Shipments of Assembled Passenger Cars and Motor Trucks†

Year	Machines Driven Overland	Machines Shipped by Boat	R. R. Freight Carloads of Machines	Year	Machines Driven Overland	Machines Shipped by Boat	R. R. Freight Carloads of Machines
1922...	751,347	58,220	405,195	1924...	894,825	55,499	579,745
1923...	1,142,315	81,587	604,080	1925...	1,120,780	103,158	680,165

†Including assembling plants.

## Capital Invested in Automobile Manufacturing

(Tangible assets, U. S. factories)

Year	Cars	Trucks	Total
1919.....	\$784,660,761	\$230,782,577	\$1,015,443,338
1920.....	897,953,600	306,425,600	1,204,378,600
1921.....	1,134,166,000	289,334,000	1,423,500,000
1922.....	1,154,103,335	302,546,620	1,456,649,954
1923.....	1,281,364,300	290,358,100	1,571,722,400
1924.....	1,373,372,426	317,677,686	1,691,050,112
1925.....	1,503,290,062	384,738,748	1,888,028,810

## 3,445,642 Persons Employed in the Automobile Industry

EMPLOYED DIRECTLY		EMPLOYED INDIRECTLY	
Motor vehicle factory workers.....	361,442	Iron and steel workers.....	65,000
Parts and accessory factory workers.....	350,000	Copper, lead, tin, nickel and aluminum workers.....	14,000
Tire factory workers.....	120,000	Railroad workers.....	90,000
Motor vehicle dealers and salesmen.....	196,000	Plate glass workers.....	12,000
Supplies, accessories and parts dealers and salesmen.....	140,000	Tannery and leather workers..	10,000
Garage employees.....	115,000	Woodworkers.....	25,000
Tire dealers and salesmen.....	95,000	Upholstering cloth, top and side curtain material workers.....	20,000
Repair shop employees.....	480,000	Asbestos workers.....	700
Professional chauffeurs.....	475,000	Paint and varnish factory workers.....	1,500
Professional truck drivers.....	800,000	Coal miners.....	3,000
Gasoline refinery and oil workers	60,000		
Automobile financing and insurance.....	12,000	<b>Total indirectly employed</b>	<b>241,200</b>
<b>Total directly employed</b>	<b>3,204,442</b>	<b>Grand Total</b>	<b>3,445,642</b>

The figures for the various industries are based on the per cent of total output of product consumed by the automobile industry. No estimates have been attempted for the number of people on road construction work, manufacturing of machine tools and other production equipment, extension of automobile plants, etc.

## Employment and Wages in Motor Car and Truck Factories

(United States)

Year	Number	Wages	Year	Number	Wages
1919.....	210,559	\$312,165,870	1922.....	253,104	\$395,707,531
1920.....	244,700	490,160,000	1923.....	318,098	579,002,686
1921.....	186,000	299,098,780	1924.....	329,563	547,215,700
			1925.....	361,442	649,668,829

## Automobile Insurance Premiums\*

(Figures from the National Automobile Underwriters Conference and the National Bureau of Casualty and Surety Underwriters)

Coverage	1922	1923	1924	1925
Fire.....	\$33,029,261	\$42,815,776	\$45,904,251	\$47,786,325
Theft.....	31,618,966	44,218,527	45,223,348	47,077,505
Collisions.....	15,554,963	15,217,719	18,180,126	18,925,512
Property Damage.....	1,986,095	2,656,725	2,871,144	2,988,860
Public Liability.....	not available	108,297,182	128,751,109	140,000,000
Miscellaneous.....	1,260,085	1,360,243	1,305,065	1,358,573
<b>Total.....</b>	<b>\$83,449,370</b>	<b>\$214,566,172</b>	<b>\$242,235,043</b>	<b>\$258,136,775</b>

\*Includes premiums on motor trucks and other commercial vehicles.

# Automobile Retail Financing

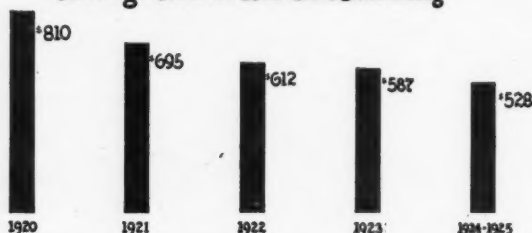
**Standard terms 12 equal monthly payments**  
**with 33 $\frac{1}{3}$ % cash down payment on new cars**  
**with 40% " " " " used "**

**75% of Automobiles purchased on instalment plan**

**Average note given at time of purchase** new cars \$528.  
used " \$280.

**Paper outstanding on new motor vehicles \$972,000,000.**

**Average Note on New Cars Decreasing**



## Canadian Car and Truck Production

(Figures from Dominion Bureau of Statistics)

Year	Cars*	Trucks	Total	Year	Cars*	Trucks	Total
1919...	79,936	7,899	87,835	1923...	127,976	19,226	147,202
1920...	83,636	10,508	94,144	1924...	98,365	18,043	132,580
1921...	61,098	5,148	66,246	1925...	139,311	22,075	161,386
1922...	92,838	8,169	101,007				

\*Including special chassis.

## Nation's Motor Transport Annual Bill \$11,000,000,000

An estimate of about \$10,000,000,000, a year it may be asserted, covers the operating costs of the country's 20,000,000 motor vehicles. This is based on the average figures of 10 cents per mile\* and 5,000 miles per year. The country's annual highway expenditures amount to about a billion dollars per year. Motor vehicle transportation involves an annual cost of about \$11,000,000,000.—*Henry R. Trumbower, Economist, U. S. Bureau of Public Roads in address before Western Society of Engineers, April 21, 1926.*

\*For detailed figures see study by Iowa State College given on page 19.

# Time Payments Losses Less Than $\frac{1}{5}$ th of 1%




On New Cars Financed on Standard Terms of  
One Third Down and 12 Monthly Payments

(Figures from National Association of Finance Companies)

## TABLE OF CREDIT LOSSES

### New Car Paper

#### 12 Months

$\frac{1}{3}$ down	0.16%	
$\frac{1}{4}$ "	0.25%	
24% or less	0.72%	

#### 16-18 Months

$\frac{1}{3}$ down	0.25%	
$\frac{1}{4}$ "	0.56%	
24% or less	1.63%	

#### 19 or more Months

$\frac{1}{3}$ down	0.72%	
$\frac{1}{4}$ "	1.59%	
24% or less	4.58%	

### Used Car Paper

#### 12 Months

40% down	0.54%	
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36% or less	1.1%	
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#### 16-18 Months

40% down	0.84%	
----------	-------	---

36% or less	1.72%	
-------------	-------	---

#### 19 or more Months

40% down	2.54%	
----------	-------	---

36% or less	4.84%	
-------------	-------	---

# Raw Materials Used in Manufacturing Motor Cars and Trucks, 1925

	Amount used in motor vehicle manu- facturing and % of total U. S. produc- tion of raw materials
Iron and Steel (tons).....	4,229,000 <sup>1</sup>
Production of finished rolled iron and steel (tons) ..	33,850,000
Per cent used in manufacturing motor vehicles.....	12.5%
Plate Glass (square feet).....	62,460,000
Production.....	117,000,000
Per cent used in motor vehicles.....	53%
Leather, upholstery (square feet).....	44,821,400
Production of upholstery leather.....	64,589,150
Per cent used in motor vehicles.....	69%
Rubber (tons).....	320,986
Total consumption of crude rubber.....	386,000
Per cent used in motor vehicles.....	83%
Lumber, hardwood (board feet).....	820,241,000
Production of hardwoods.....	6,000,000,000
Per cent used in motor vehicles.....	13.6%
Aluminum (pounds).....	58,000,000
Production.....	200,000,000
Per cent used in motor vehicles.....	29%
Copper (pounds).....	225,000,000
Total consumption.....	1,894,666,000
Per cent.....	11.9%
Tin (tons).....	12,000
Total deliveries.....	76,455
Per cent used in motor vehicles.....	15.7%
Lead (tons).....	105,000
Domestic production.....	763,000
Per cent used in motor vehicles.....	13.7%
Zinc (tons).....	21,000
Production.....	590,928
Per cent used in motor vehicles.....	3.5%
Nickel (pounds).....	9,000,000 <sup>2</sup>
Total U. S. consumption.....	32,000,000
Per cent used in motor vehicles.....	28%
Lumber, softwood (board feet).....	364,792,000
Cloth, upholstery (yards).....	30,285,000
Imitation leather (square feet).....	108,950,000
Top and side curtain material (yards).....	20,810,000
Paint and varnish (gallons).....	15,178,500
Hair and padding (pounds).....	43,360,000
Iron for license plates 1925 (tons).....	9,400
Gasoline (gallons).....	7,489,675,000
Domestic consumption, Total.....	9,362,094,000
Per cent used by motorists.....	80%

<sup>1</sup>Estimated by Iron Age. <sup>2</sup>International Nickel Company.

## 1925 Parts, Accessory and Tire Business

(Figures from Motor and Accessory Manufacturers Association)

1. Total wholesale value of business.....	\$2,052,088,000
2. Units, parts, accessories and tires for <i>original equipment</i> .....	1,128,648,000
3. Units, parts, accessories and tires for <i>replacement and additional equipment</i> .....	923,440,000

## Rubber Production and Consumption

### Exports from British and Dutch Middle East Possessions

(Figures in first three columns from Rubber Association of America; Middle East figures from U. S. Department of Commerce)

Year	World Production (Plantation and Wild)	World Consumption	U. S. Consumption Plantation Rubber	Net Exports from Middle East*	
				BRITISH	DUTCH
1915.....	158,702	156,113	96,800	96,095	17,811
1916.....	201,598	134,826	116,500	128,010	30,443
1917.....	265,698	224,375	157,400	175,382	44,889
1918.....	296,579	236,358	163,700	136,926	43,345
1919.....	326,860	317,628	211,100	257,484	88,189
1920.....	343,731	298,435	203,400	226,081	75,522
1921.....	293,960	285,752	178,900	200,959	72,227
1922.....	379,920	412,493	299,000	271,589	102,171
1923.....	412,771	454,891	319,700	237,434	137,158
1924.....	421,217	475,841	337,200	205,027	175,298
1925.....	515,947	550,000	386,000	223,000	190,000

\*Owing to rapid increase during the last four years in exports of wet native-grown rubber from Dutch East Indies, practically all of which goes through Singapore for re-milling, and on which there has been a heavy shrinkage, the Dutch exports as given above are too high, and the British exports too low, by the amount of this shrinkage. An exact division between the two countries is impossible.

## Gasoline Figures for United States

(Figures from U. S. Bureau of Mines)

Year	Thousands of Gallons				Stocks Dec. 31
	Production	Imports	Exports	Consumption	
1920.....	4,882,547	40,478	656,740	4,250,696	462,382
1921.....	5,153,549	37,816	551,633	4,516,027	586,087
1922.....	6,202,235	62,133	594,576	5,372,085	883,793
1923.....	7,555,945	191,314	871,117	6,685,035	1,074,900
1924.....	8,959,680	145,023	1,219,474	7,780,625	1,179,503
1925.....	10,886,127	160,137	1,330,314	9,362,094	1,648,328

## Rubber Tire Figures

(Compiled by The Rubber Association of America, Inc.)

	Production		Shipments	
	1924	1925	1924	1925
High pressure casings.....	46,000,000	40,087,529	45,938,000	39,863,384
Balloon casings.....	*5,633,000	20,756,858	*4,735,000	19,504,182
Solid and cushion.....	910,000	1,011,866	896,000	1,067,193
Inner tubes†.....	70,705,000	82,614,034	68,100,000	80,992,012

\*—10 months. †—Includes balloon inner tubes.



# Farm Owned Motor Cars, 1925

(Figures as of December 31, 1925, estimated by Farm Journal from best available data.)

## 12% Gain in Rural Registration

### Total Now 4,332,482



**Figures do not Include Village Registration, in  
Hamlets under 1000 Population**

	All Motor Vehicles on Farms	Motor Cars	Motor Trucks
Texas.....	263,753	242,602	21,151
Iowa.....	228,738	206,809	21,929
Illinois.....	225,915	202,475	23,440
Ohio.....	224,594	192,354	32,240
Pennsylvania.....	206,841	168,973	37,868
New York.....	197,758	162,760	34,998
Wisconsin.....	197,752	172,852	24,900
Indiana.....	189,026	167,446	21,580
Missouri.....	183,688	165,132	18,556
Minnesota.....	173,767	163,612	20,155
Michigan.....	172,013	157,173	14,840
Kansas.....	159,809	145,506	14,303
California.....	156,369	138,133	18,236
Nebraska.....	146,779	134,056	12,723
Oklahoma.....	138,553	128,700	9,853
North Carolina.....	102,415	96,425	5,990
Virginia.....	91,045	80,484	10,561
Georgia.....	89,533	84,530	5,003
South Dakota.....	87,667	80,843	6,824
North Dakota.....	83,029	76,373	6,656
Kentucky.....	82,997	77,520	5,477
Washington.....	72,540	62,702	9,838
Tennessee.....	61,426	58,143	3,283
Oregon.....	58,424	52,078	6,346
South Carolina.....	57,644	51,956	5,688
Maryland.....	56,555	48,332	8,223
Mississippi.....	52,949	49,560	3,389
Colorado.....	52,158	46,405	5,753
Alabama.....	44,912	42,390	2,522
Arkansas.....	43,382	40,041	3,341
Montana.....	41,448	37,704	3,744
New Jersey.....	40,726	29,890	10,836
Florida.....	37,512	30,318	7,194
Massachusetts.....	36,152	25,410	10,742
West Virginia.....	35,658	32,624	3,034
Louisiana.....	34,276	30,882	3,394
Maine.....	31,069	26,702	4,367
Idaho.....	30,944	29,676	1,268
Connecticut.....	21,772	16,800	4,972
Utah.....	19,651	18,562	1,089
Vermont.....	19,563	17,325	2,238
New Hampshire.....	17,586	14,773	2,813
Wyoming.....	15,729	14,297	1,432
New Mexico.....	15,724	14,495	1,229
Arizona.....	12,247	10,890	1,357
Delaware.....	10,483	8,055	2,428
Nevada.....	5,018	4,681	337
Rhode Island.....	4,893	4,077	816
United States.....	4,332,482	3,853,526	478,956
1924 Total.....	3,821,085	3,453,159	367,926

## Distribution of Motor Car Regis- tration in Rural and Other Communities

(Figures as of July 1, 1925, by courtesy of  
R. L. Polk Company)

	%
Towns under 1,000 including Rural	28.5
Towns 1,000 to 2,500.....	11.3
Towns 2,500 to 5,000.....	7.0
Towns 5,000 to 10,000.....	8.3
Towns 10,000 to 25,000.....	8.9
Towns 25,000 to 50,000.....	6.5
Towns 50,000 to 100,000.....	6.0
Towns 100,000 to 500,000.....	11.1
Towns 500,000 and over.....	12.4
<b>Total.....</b>	<b>100.0</b>

## Number of Cities by Sizes

(Figures from "Motor")

Number of cities in U. S. having 15,000 to 1,000,000 population..	573
Number of cities in U. S. having 2,500 to 15,000 population.....	2,300

## Jersey Bus Travel Grows

Motor bus travel in New Jersey is in-  
creasing rapidly as indicated by the follow-  
ing figures of the Public Service Corpora-  
tion.

	Trolley passengers	Bus passengers	Carried by buses
1925.....	416,788,621	146,053,237	26%
1924.....	427,828,444	69,383,643	14%
1923.....	354,194,933	1,952,059	1/2%
1922.....	410,212,814	.....	.....

—Automobile Topics



# MOTOR REPAIR BILLS DECREASING

(Figures from Chilton Class Journal Company)

## AVERAGE PURCHASES PER MOTOR VEHICLE

	1919	1921	1923	1925
Replacement Parts and Supplies.....	\$45	\$40	\$40	\$33
Tires for Replacement.....	82	49	39	34
Fuels and Lubricants.....	98	74	88	105
Service Labor.....	56	58	55	45
Average Cost of Operation and Maintenance (excl. deprec. and garaging)	\$281	\$221	\$222	\$217

## TOTAL SALES BY SERVICE STATIONS AND REPAIR SHOPS

	1919	1921	1923	1925
Parts and Service Supplies.....	\$340,100,000	\$415,400,000	\$601,100,000	\$655,000,000
Tires for Replacement.....	620,000,000	510,100,000	593,500,000	675,000,000
Fuels and Lubricants.....	738,210,000	769,390,000	1,326,200,000	2,100,000,000
Service Labor.....	427,000,000	610,500,000	835,000,000	910,000,000
Total Operation and Maintenance (excluding Depreciation and Garaging).....	\$2,125,610,000	\$2,305,390,000	\$3,355,800,000	\$4,340,000,000

## MOTOR VEHICLES PER SERVICE STATION

	1919	1921	1923	1925
Motor Vehicle Registrations.....	7,565,446	10,463,295	15,082,177	19,954,347
Service Stations and Repair Shops.....	43,643	57,397	67,802	75,105
Motor Vehicles, per Repair Shop..	174	182	223	266

# 10 Cents Per Mile Pays All Costs of Operation of Average Car

(Study of Operating Costs of 11 typical cars ranging from \$400 to \$1800, as reported in Bulletin No. 69, Iowa State College)

## CENTS PER MILE, WITH PERCENTAGES

	Light Four Touring		Big Four Touring		Medium Six A Touring		Medium Six B Roadster		Medium Six C Roadster	
	Cents per Mile	Per Cent	Cents per Mile	Per Cent	Cents per Mile	Per Cent	Cents per Mile	Per Cent	Cents per Mile	Per Cent
Gasoline.....	1.40	19.6	1.70	12.9	1.78	19.3	1.80	15.0	1.74	20.5
Oil.....	.26	3.7	.45	3.4	.13	1.4	.38	3.1	.34	4.0
Tires.....	.96	13.7	1.00	7.6	.85	9.2	1.20	10.0	1.23	14.5
Maintenance.....	.85	12.1	.72	5.5	.93	10.1	1.37	11.4	.96	11.3
Depreciation.....	1.62	23.1	4.00	30.4	3.10	33.5	4.40	36.6	3.07	36.1
Interest.....	1.08	15.3	2.13	16.2	.99	10.7	.51	4.3	.52	6.1
Insurance.....	.17	.24	.17	1.3	.50	5.4	.97	8.2	.05	.6
Garage.....	.38	.54	1.80	13.7	.65	7.0	1.00	8.3	.32	3.6
License.....	.33	.47	1.18	9.0	.31	3.4	.38	3.1	.26	3.1
Totals.....	7.63	100.0	13.15	100.0	9.24	100.0	12.61	100.0	8.49	100.0

	Light Four Coupe		Light Four Sedan		Heavy Four Sedan		Light Six Coach		Composite Car	
	Cents per Mile	Per Cent	Cents per Mile	Per Cent	Cents per Mile	Per Cent	Cents per Mile	Per Cent	Cents per Mile	Per Cent
Gasoline.....	1.61	16.7	1.47	15.3	1.66	14.5	1.29	11.0	1.61	15.7
Oil.....	.35	3.6	.36	3.7	.38	3.3	.18	1.5	.31	3.0
Tires.....	.55	5.7	.90	9.4	1.00	8.8	1.11	9.5	.98	9.5
Maintenance.....	1.56	16.2	1.88	19.5	1.44	12.6	1.43	12.2	1.24	12.1
Depreciation.....	2.44	25.3	2.93	30.4	4.50	39.5	2.40	20.4	3.16	30.8
Interest.....	1.77	18.3	.70	7.3	.88	7.7	2.62	22.3	1.24	12.1
Insurance.....	.15	1.6	.22	2.3	.10	.9	.50	4.3	.31	3.0
Garage.....	1.05	10.9	.73	7.6	1.04	9.1	.50	4.3	.83	8.1
License.....	.27	2.7	.44	4.5	.41	3.6	1.70	14.5	.59	5.7
Totals.....	9.65	100.0	9.63	100.0	11.41	100.0	11.73	100.0	10.27	100.0

# 48,555 Motor Vehicle Dealers in U. S. A.

(Figures from Chilton Class Journal Co., Mar. 1926)

	Total Dealers	Total Passenger Car Dealers	Total Truck Dealers	Truck Dealers Exclusively	Dealers in Both Cars and Trucks	Garages	Repair Shops Ind. and Dealers' Serv. Stations	Retail Supply Stores and Supply Depts.	Total Retail Trade Names Dupe. eliminated
Alabama....	325	318	217	7	210	328	623	593	747
Arizona....	215	207	109	8	101	244	324	309	380
Arkansas....	426	421	248	5	243	412	652	540	753
California....	2367	2217	965	150	815	3165	4738	3304	5731
Colorado....	642	611	328	31	297	702	965	860	1134
Connecticut....	633	607	233	26	207	571	1023	827	1289
Delaware....	90	87	45	3	42	69	169	111	200
D. of C.....	100	81	47	19	28	88	181	155	272
Florida....	587	545	270	42	228	497	928	678	1124
Georgia....	479	456	301	23	278	495	859	633	977
Idaho....	256	252	148	4	144	292	381	334	416
Illinois....	3256	3146	1375	110	1265	3496	5182	4295	6484
Indiana....	1666	1609	678	57	621	1737	3128	3107	3770
Iowa....	1945	1906	1166	39	1127	2181	3186	2406	3601
Kansas....	1310	1278	653	38	615	1815	2262	1980	2728
Kentucky....	752	727	379	25	354	684	1052	792	1195
Louisiana....	360	344	221	16	205	366	591	498	673
Maine....	479	464	227	15	212	471	791	576	907
Maryland....	517	486	232	31	201	525	807	649	981
Mass.....	1167	1151	481	61	420	1315	2301	1483	3002
Michigan....	2007	1962	1020	45	975	2224	3084	2969	3897
Minnesota....	1711	1666	940	45	895	1997	2525	1857	2887
Mississippi....	340	335	229	5	224	302	455	404	554
Missouri....	1395	1343	641	52	589	1703	2544	2035	3015
Montana....	359	345	217	14	203	369	502	464	576
Nebraska....	985	967	571	18	553	1198	1572	1357	1743
Nevada....	108	107	47	1	46	109	148	129	168
New Hamp... New Jersey..	278 1345	272 1270	112 523	6 75	106 448	270 1400	478 2328	336 1640	549 3007
New Mexico..	150	148	93	2	91	212	244	236	278
New York....	3751	3535	1715	216	1499	4558	6269	5067	8485
N. Carolina..	767	743	401	24	377	665	1277	937	1438
N. Dakota... Ohio.....	577 3108	556 2991	385 1332	21 117	364 1215	541 2697	726 5115	621 3534	884 6259
Oklahoma....	834	806	490	28	462	1029	1359	1213	1595
Oregon....	490	473	235	17	218	741	1002	833	1195
Penna.....	4038	3857	1760	181	1579	4672	6055	5351	7562
Rhode Island	225	208	71	17	54	217	391	227	521
S. Carolina..	353	346	180	7	173	184	568	379	650
S. Dakota... Tennessee...	667 493	642 458	381 282	25 35	356 247	677 461	848 768	721 576	1019 922
Texas....	1875	1822	952	53	899	2461	4079	3156	5012
Utah.....	198	192	128	6	122	220	320	275	362
Vermont....	271	268	154	3	151	128	440	436	502
Virginia....	733	711	407	22	385	623	1046	882	1248
Washington..	867	835	417	32	385	1070	1505	1319	1781
W. Virginia..	725	689	344	36	308	748	892	855	1083
Wisconsin...	2078	2014	1062	64	998	2084	2846	2372	3321
Wyoming....	204	198	94	6	88	205	260	249	300
United States..	48555	46672	23506	1883	21623	53218	79789	64560	7177
Canada.....	1929	1872	1273	57	1216	2186	2636	2240	3052

# Parts and Accessory Wholesalers

(Figures from Chillon Class Journal Company, March-1926)

STATE	M Motor Replacement Parts	C Chassis Replacement Parts	Total M & C without dupl. of names†	E Elec- trical Parts	O Shop and Garage Equip.	T Tools; Tools; Hand Tools	A Access- ories; Special- ties	B Bodies; Body Repairs & Suppl.	Total Bench Tools Dupl. Elim.
	1	2	3	4	5	6	7	8	9
Alabama.....	18	17	21	12	7	10	19	0	28
Arizona.....	9	12	12	9	5	4	18	1	18
Arkansas.....	11	10	11	4	4	4	7	0	12
California.....	157	167	183	86	58	70	130	6	274
Colorado.....	30	30	33	18	9	16	24	0	41
Connecticut.....	42	45	47	20	18	22	52	2	69
Delaware.....	7	7	7	3	3	2	8	0	9
District of Columbia.....	17	19	20	8	7	8	15	1	29
Florida.....	28	30	32	22	14	12	32	3	47
Georgia.....	23	21	24	17	15	16	21	0	37
Idaho.....	12	14	14	9	6	6	11	0	17
Illinois.....	124	130	137	66	43	62	150	6	204
Indiana.....	84	88	94	37	33	54	69	4	114
Iowa.....	70	77	81	39	26	28	64	4	106
Kansas.....	39	36	41	33	14	21	42	0	63
Kentucky.....	22	26	27	13	14	12	20	0	37
Louisiana.....	28	30	32	13	16	16	27	1	44
Maine.....	17	18	21	9	11	9	22	0	28
Maryland.....	18	18	22	14	15	11	31	1	47
Massachusetts.....	98	97	113	54	56	49	114	4	157
Michigan.....	66	69	74	28	29	37	74	3	113
Minnesota.....	45	48	55	19	20	15	14	3	73
Mississippi.....	5	5	5	2	3	4	5	0	7
Missouri.....	75	76	82	44	43	39	81	4	129
Montana.....	10	12	13	9	6	4	16	0	21
Nebraska.....	35	39	41	18	11	9	34	3	54
Nevada.....	2	2	2	1	1	1	2	0	3
New Hampshire.....	4	5	5	6	3	5	8	0	11
New Jersey.....	64	71	76	32	26	29	53	6	106
New Mexico.....	3	3	3	2	1	1	2	1	4
New York.....	202	197	222	103	115	101	235	14	379
North Carolina.....	28	31	32	17	12	15	25	0	43
North Dakota.....	6	5	6	2	5	4	8	0	9
Ohio.....	124	136	146	71	61	68	142	9	234
Oklahoma.....	34	32	35	18	15	21	39	1	58
Oregon.....	30	32	36	16	11	17	29	2	49
Pennsylvania.....	156	167	183	79	86	84	180	9	277
Rhode Island.....	16	18	18	7	12	10	15	0	23
South Carolina.....	18	20	21	11	11	11	26	1	30
South Dakota.....	13	13	13	12	12	10	12	1	22
Tennessee.....	34	39	41	18	17	16	31	4	51
Texas.....	80	88	91	51	49	45	101	8	132
Utah.....	11	14	14	7	6	9	12	0	17
Vermont.....	3	6	6	5	4	4	9	0	10
Virginia.....	26	31	32	13	13	15	28	1	39
Washington.....	54	56	64	31	20	23	45	3	92
West Virginia.....	24	26	27	18	15	17	28	0	38
Wisconsin.....	53	58	61	32	22	24	55	2	84
Wyoming.....	6	5	6	4	4	4	5	0	6
Canada.....	109	115	122	80	63	70	120	6	159
Cuba.....	0	1	1	1	1	1	2	0	2
Hawaiian Islands.....	9	9	9	9	5	6	10	0	10
West Indies.....	5	6	6	1	5	1	6	0	6
Total.....	2,204	2,327	2,520	1,253	1,091	1,152	2,325	114	3,667

†Note—Column 3 represents total number of names without duplication in Columns 1 and 2; that is, Replacement Parts Wholesalers of either Motor Parts or Chassis Parts or both.

## KEY FOR SYMBOLS INDICATING PRODUCTS HANDLED

M—Motor Replacement Parts, such as Pistons, Pins, Rings, Valves, Timing Gears, Carburetors, etc.

C—Chassis Parts, such as Ball and Roller Bearings, Transmission and Ring and Pinion Gears.

E—Electrical Parts, such as I. S. L. Outfits and Repair Parts, Coils, Distributors, Generators.

O—Shop and Garage Equipment, such as Pumps, Hoists, and Power Equipment such as Lathes, Drill

Presses.

T—Tools, Bench Tools, such as Drills, Reamers, Punches. Hand Tools, such as Pliers, Wrenches.

A—Accessories and Specialties, such as Bumpers, Clocks, Heaters, Chassis Lubricating Systems.

B—Bodies, such as Special Bus, Passenger Car, Taxicab and Truck Bodies, Body Repairs, Trailers, Up-

holstery Materials, Trim Shop Supplies, etc.

**\$667,000,000**

**Motor Vehicle Taxes in 1925**

**\$567,000,000 of Total are *Special* Motor Taxes  
Not Including \$100,000,000 Personal  
Property Levies**

**FEDERAL**

1. Passenger Car .....	\$111,984,848.42	
2. Commercial Vehicle .	8,359,299.53	
3. Parts, tires and Ac- cessories.....	23,086,560.60	
		<hr/>
		\$143,430,708.55
4. Vehicles for Hire.....	1,865,075.43	
		<hr/>
		<b>\$145,295,783.98</b>

**STATE**

1. Registration Fees, in- cluding Drivers' Licenses .....	\$260,619,621.00	
2. Gasoline Taxes.....	146,028,940.00	
3. Personal Property Taxes.....	100,000,000.00	
		<hr/>
		<b>\$506,648,561.00</b>

**MUNICIPAL**

Municipal Taxes on the Motor Vehicle.....	\$15,000,000.00	
		<hr/>
		\$15,000,000.00
		<hr/>
		<b>\$666,944,344.98</b>

*(Federal Figures from U. S. Bureau of Internal Revenue, State Figures from U. S.  
Bureau of Public Roads, Municipal and Personal Property Figures from  
National Automobile Chamber of Commerce)*

## Federal Motor Vehicle Excise Taxes Compared to Total Internal Revenue Receipts

(Fiscal Year Figures; from Internal Revenue Bureau)

Fiscal Year	Total U. S. Internal Revenue Receipts	Excise Taxes on Motor Vehicles	% Total Receipts Paid by Auto Excise Taxes
1918.....	\$3,696,043,485	\$23,981,268 (9 months)	.65%
1919.....	3,840,230,995	48,834,271	1.27%
1920.....	5,399,149,245	143,922,792	2.66%
1921.....	4,579,973,609	115,546,249	2.52%
1922.....	3,197,451,083	104,433,762	3.26%
1923.....	2,621,745,227	144,293,402	5.5 %
1924.....	2,796,179,257	158,014,709	5.6 %
1925.....	2,584,140,268	124,686,745	4.8 %

## Federal Motor Vehicle Excise Taxes—FISCAL Years

(Figures from U. S. Internal Revenue Bureau)

Year	Automobile, motorcycle, etc.	Motor Trucks	Automobiles and motorcycles	Tires, accessories parts, etc.	Total
1918 (9 mo.)..	\$23,981,268.35				\$23,981,268.35
1919.....	24,076,261.97	\$1,934,222.51	\$17,915,510.81	\$4,908,276.18	48,834,271.47
1920.....		14,471,464.32	76,315,814.26	53,135,513.43	143,922,792.01
1921.....		11,640,055.92	64,388,184.22	39,518,009.17	115,546,249.31
1922.....		8,404,557.85	56,684,540.30	39,344,664.60	104,433,762.75
1923.....		10,678,761.05	92,736,580.44	40,875,148.79	144,290,490.28
1924.....		11,510,563.05	112,870,536.57	33,633,609.78	158,014,709.40
1925.....		7,807,811.16	94,141,549.29	22,737,384.85	124,686,745.30
1926 (first six months of fiscal year).. Total....	4,885,196.60 \$48,057,530.32	61,419,347.91 \$71,332,632.46	12,801,274.41 \$576,472,063.80	79,105,818.92 \$246,953,881.21	\$942,816,107.79

## Federal Motor Vehicle Excise Taxes—CALENDAR Years

(Source—Internal Revenue Bureau, U. S. Treasury Dept.)

Calendar Year	Motor Trucks	Automobiles and Motorcycles	Tires, Parts and Accessories	Total
1917.....				\$3,323,089.43
1918.....				35,957,077.92
1919.....	\$8,765,122.57	\$52,860,310.36	\$30,735,394.75	101,138,190.65
1920.....	15,134,594.14	83,128,363.17	50,944,562.32	149,207,519.63
1921.....	8,245,404.22	51,237,358.20	40,484,660.39	99,967,422.81
1922.....	9,583,211.67	69,856,599.44	35,353,589.09	114,793,400.20
1923.....	10,909,631.19	106,280,962.46	38,606,349.94	155,796,943.59
1924.....	10,335,369.00	101,123,621.00	27,742,764.12	139,201,755.01
1925.....	8,359,299.53	111,984,848.42	23,086,560.60	143,430,708.55
Total....	\$71,332,632.46	\$576,472,063.80	\$246,953,881.21	\$942,816,107.79

## Methods for Improving Traffic

### 1. Public Opinion.

Ostracism of the careless driver will make him mend his ways.

### 2. Swift Justice

Prompt punishment of the reckless by responsible courts will cause respect for law. "Fining squires" should be eliminated.

### 3. Playgrounds.

Children are entitled to proper and adequate play space. Efforts to restrict play in the streets should be accompanied by providing play space in every neighborhood.

### 4. Scientific Knowledge.

Every community should have a complete up-to-date record of volume of traffic on its streets, and the circumstances of all highway accidents. Such knowledge is essential in determining improvements.

### 5. Build for Present and Future.

Streets should be modernized to meet current needs. Dead-end streets, grade-crossings especially in cities, draw bridges, narrow bridges, and other "bottle-necks" which obstruct traffic should be removed. Streets must be improved for present and future needs.

NOTE—Detailed studies of the various phases of traffic and safety are contained in the Reports of the THIRD NATIONAL CONFERENCE ON STREET AND HIGHWAY SAFETY. These may be obtained without charge from the Department of Commerce, Washington, D. C.

## Ratio of Motor Fatalities to Registration

Year	Auto- mobile Fatalities	Motor Vehicle Regis- tration	Fatalities per 100,000 Regis- tration	Year	Auto- mobile Fatalities	Motor Vehicle Regis- tration	Fatalities per 100,000 Regis- tration
1917...	9,097	5,104,321	178	1922...	13,676	12,238,375	112
1918...	9,457	6,146,617	154	1923...	16,452	15,092,177	109
1919...	9,825	7,565,446	130	1924...	17,566	17,593,677	100
1920...	11,074	9,231,941	119	1925...	19,828	19,954,347	100
1921...	12,370	10,463,295	118				

## Automobile Grade Crossing Fatalities in 1925

(Figures from the American Railway Association)

1920.....	1,791	1923.....	2,268
1921.....	1,705	1924.....	2,149
1922.....	1,810	1925.....	2,206

The MONTHLY BULLETINS ON TRAFFIC AND SAFETY, published by the National Automobile Chamber of Commerce, 366 Madison Avenue, New York, contain current studies on different phases of traffic, and current statistics on accident causes furnished by more than 300 newspapers, health departments, highway departments, safety councils, motor clubs, and other groups. The bulletins are obtainable without charge.

# SAFETY HONOR ROLL

## 1925



*Fewer Fatal Motor Accidents  
Than in Preceding Year*

### 100,000 POPULATION AND OVER

	1924	1925		1924	1925
Pittsburgh, Pa.....	187 (33*)	162 (35*)	Syracuse, N. Y.....	39	28
Los Angeles, Cal.....	263 (12*)	237 ( 6*)	New Haven, Conn..	45	40
San Francisco, Cal..	113	101	Springfield, Mass..	26	20 (14*)
Washington, D. C..	104	89	Des Moines, Iowa...	18	14
New Orleans, La....	83	80	Wilmington, Del....	26	18
Minneapolis, Minn..	83	76	Cambridge, Mass....	19	18
Denver, Colo.....	39	38	Reading, Pa.....	21	18
St. Paul, Minn.....	53	47	Kansas City, Kans..	20	19
Birmingham, Ala...	56	53			

### 50,000 TO 100,000 POPULATION

	1924	1925		1924	1925
Mobile, Ala.....	13	12	Elizabeth, N. J.....	16	12
Berkeley, Cal.....	15	8 ( 4*)	Troy, N. Y.....	7	4
Fort Wayne, Ind....	19	13 ( 3*)	Tulsa, Okla.....	24	15
Haverhill, Mass....	13	7	Allentown, Pa.....	11	8
Lawrence, Mass....	21	15 ( 5*)	Wilkes Barre, Pa....	20	18
Lincoln, Nebr.....	10	9 ( 6*)	Roanoke, Va.....	13 ( 3*)	11 ( 1*)
East Orange, N. J...	7	6 ( 2*)			

### 25,000 TO 50,000 POPULATION

	1924	1925		1924	1925
Phoenix, Ariz.....	13	12	Amsterdam, N. Y....	3	2]
Pasadena, Cal.....	15 ( 4*)	13 ( 1*)	Lima, Ohio.....	6	4
San Jose, Cal. ....	28	25 (11*)	Lorain, Ohio.....	15	14 ( 2*)
Stockton, Cal.....	19 ( 7*)	13 ( 9*)	McKeesport, Pa....	19	17 ( 9*)
Pueblo, Colo.....	9	8 ( 2*)	Greenville, S. C....	15 ( 4*)	3
Meriden, Conn.....	5	4	Sioux Falls, S. D....	8 ( 3*)	3
Bloomington, Ill....	8	5 ( 1*)	Galveston, Tex....	15	10 ( 1*)
Decatur, Ill.....	13 ( 5*)	10 ( 3*)	Fond du Lac, Wis...	5	3
Everett, Mass.....	4	3	Kenosha, Wis.....	13 ( 4*)	11 ( 2*)
Salem, Mass.....	10	6	Sheboygan, Wis....	9 ( 1*)	2
Pontiac, Mich.....	20	14			

\*Accidents included in total, but occurred outside of city limits.



## 36% More Motorists Visit National Forests

(Figures from National Forest Service)

	Total Visitors	Motorists
	1925	1925
Alabama.....	2,250	1,275
Alaska.....	61,870	13,870
Arizona.....	443,018	434,520
Arkansas.....	39,400	31,200
California.....	6,421,632	6,029,994
Colorado.....	1,617,147	1,294,634
Florida.....	17,580	15,580
Georgia.....	12,042	9,538
Idaho.....	392,062	363,437
Maine.....	82,890	80,090
Michigan.....	40,285	40,000
Minnesota.....	175,708	164,254
Montana.....	581,213	509,936
Nebraska.....	8,020	7,500
Nevada.....	20,893	19,730
New Hampshire.....	746,010	720,810
New Mexico.....	204,414	191,348
North Carolina.....	216,217	211,400



## 5,362 Motor Camps in United States

(Figures from "Motor Camper and Tourist")

INCLUDING motor camps of every description and size, ranging from the Denver Municipal camp with accommodations for 1,000 cars to way-side camps that would not accommodate more than half a dozen cars there are approximately 10,000 motor camps in this country. Since the 10,000 embrace locations which are no more than space to camp it presents a true picture to list only those sites which afford some accommodations. The following is a list of the number of camps of recognized standing by states.

Camps	Camps
Alabama..... 38	Maine..... 65
Arizona..... 28	Maryland..... 11
Arkansas..... 54	Massachusetts..... 25
California..... 996	Michigan..... 147
Colorado..... 276	Minnesota..... 167
Connecticut..... 21	Mississippi..... 8
Delaware..... 1	Missouri..... 66
D. of Columbia..... 5	Montana..... 106
Florida..... 80	New Hampshire..... 42
Georgia..... 58	Nebraska..... 58
Idaho..... 18	Nevada..... 9
Illinois..... 203	New Jersey..... 11
Indiana..... 179	New Mexico..... 39
Iowa..... 181	New York..... 40
Kansas..... 104	North Carolina..... 12
Kentucky..... 24	North Dakota..... 52
Louisiana..... 15	Ohio..... 81



	Total Visitors	Motorists
Oklahoma.....	92,000	89,500
Oregon.....	1,919,241	1,796,020
Pennsylvania.....	3,000	2,600
South Carolina.....	4,439	3,400
South Dakota.....	195,095	173,083
Tennessee.....	10,362	9,437
Utah.....	359,354	317,896
Virginia.....	53,400	47,800
Washington.....	1,173,472	1,117,316
West Virginia.....	2,700	2,000
Wyoming.....	383,956	343,581
Total.....	15,279,730	14,041,811
1924.....	11,394,366	10,323,821

## 17% More Cars at National Parks, 1925

(Figures from Report of Director of National Park Service)

Total visitors in National Parks, 1925.....	1,760,512
Total motorists visiting National Parks 1925 (estimated).....	1,215,100

Year	No. of Cars
1916.....	29,358
1917.....	54,692
1918.....	53,966
1919.....	97,721
1920.....	128,074
1921.....	175,825
1922.....	197,105
1923.....	271,482
1924.....	315,916
1925.....	368,212



Camps	Camps
Oklahoma..... 52	Wisconsin..... 226
Oregon..... 45	Washington..... 68
Pennsylvania..... 46	Wyoming..... 25
Rhode Island..... 5	
South Carolina..... 6	Town Camps.. 4,062
South Dakota..... 76	National Forest Camps... 1,000
Tennessee..... 29	National Park Camps..... 300
Texas..... 219	Grand Total... 5,362
Utah..... 20	
Vermont..... 35	
Virginia..... 26	
West Virginia..... 28	

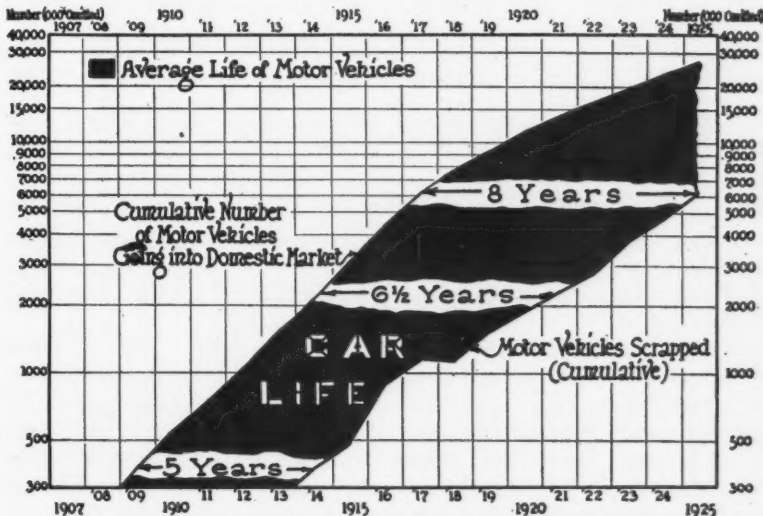


## Annual Replacement Market Growing

	DOMESTIC MARKET			TOTAL	
Year	Annual	Cumulative	Motor Vehicle Registration	MOTOR VEHICLES Cumulative	SCRAPPED Annual
1913 . . .	458,603	1,537,102	1,258,062	279,040	144,541
1914 . . .	543,585	2,080,687	1,711,339	369,348	90,308
1915 . . .	828,881	2,909,568	2,445,666	463,902	94,554
1916 . . .	1,504,203	4,413,771	3,512,996	900,775	436,873
1917 . . .	1,788,792	6,202,563	4,983,340	1,219,225	318,450
1918 . . .	1,106,467	7,309,030	6,146,617	1,162,413	*56,812
1919 . . .	1,891,403	9,200,433	7,565,446	1,634,987	472,574
1920 . . .	1,936,611	11,137,044	9,231,941	1,905,103	270,116
1921 . . .	1,558,287	12,695,381	10,463,295	2,232,036	326,933
1922 . . .	2,483,410	15,178,741	12,238,375	2,940,366	708,330
1923 . . .	3,790,597	18,969,338	15,092,177	3,877,161	936,795
1924 . . .	3,291,259	22,260,597	17,593,677	4,666,920	789,759
1925 . . .	3,863,797	26,124,394	19,954,347	6,170,047	1,503,127

\*Motor vehicles put into use again after having been discarded in previous year.

### AVERAGE LIFE OF MOTOR VEHICLES 8 YEARS



The useful life of motor vehicles has been gradually increasing. The black area, read horizontally, represents the average life of motor vehicles. The curve forming the left edge shows the number of vehicles put into use, the annual figures having been added cumulatively. The curve forming the right edge shows the total vehicles scrapped, since the beginning of the industry, at the end of any particular year. The horizontal distance between the left and the right edges of the black portion represents the average life.

# Motor Truck Standards of the N. A. C. C.

(Adopted January, 1923)

Gross Weight, Chassis, Body and Freight Load	Speed, Miles per Hour	Gross Weight, Chassis, Body and Freight Load	Speed, Miles per Hour
Pneumatic tires up to 28,000 lbs..	25	20,000 lbs.....	15
Solid rubber tires, up to:		24,000 lbs.....	15
4,000 lbs.....	25	26,000 lbs.....	15
8,000 lbs.....	20	28,000 lbs.....	15
12,000 lbs.....	18		
16,000 lbs.....	16		

Note—The speed ratings should be recognized by the manufacturer as the maximum and not exceeded under any conditions. The manufacturer should stamp on the truck caution plate the actual maximum speed with load for which the truck is built and beyond which the truck is not guaranteed.

## STANDARD BODY WEIGHT ALLOWANCES FOR MOTOR TRUCKS

Load Tons	Body Weight Allowance Pounds	Load Tons	Body Weight Allowance Pounds
1 } 1½ } 2 }	1,200	3 } 3½ } 4 }	2,000
2½ }	1,500	5-ton and over.....	2,500

Note—Weights of bodies, whether built by the vehicle manufacturer or by a body builder to the order of the purchaser, should be kept within these allowances.

## STANDARD FRAME WIDTHS AND LENGTHS FOR COMMERCIAL VEHICLES

**Frame Width**, either 36 or 42 inches, for all sizes of commercial vehicles, measured back of seat.

**Frame Length**, back of seat, to be in full multiples of feet and half feet from 4 to 18 feet, thus:

Feet	Inches	Feet	Inches	Feet	Inches
4 (Equiv. to)...	48	9½ (Equiv. to)....	114	13 (Equiv. to)...	156
5 (Equiv. to)...	60	10 (Equiv. to)...	120	13½ (Equiv. to)...	162
6 (Equiv. to)...	72	10½ (Equiv. to)...	126	14 (Equiv. to)...	168
7 (Equiv. to)...	84	11 (Equiv. to)...	132	15 (Equiv. to)...	180
8 (Equiv. to)...	96	11½ (Equiv. to)...	138	16 (Equiv. to)...	192
8½ (Equiv. to)...	102	12 (Equiv. to)...	144	17 (Equiv. to)...	204
9 (Equiv. to)...	108	12½ (Equiv. to)...	150	18 (Equiv. to)...	216

Note—The standard frame lengths as adopted are independent of chassis load capacity.

(Note—A leaflet "International Standard Truck Cost System" describing forms for motor truck operation and cost may be obtained free of charge from the Motor Truck Committee, National Automobile Chamber of Commerce, 366 Madison Avenue, New York.)

# 70,000 Motor Buses in U. S. A.

ESTIMATED ANALYSIS OF BUSES IN USE JANUARY 1, 1925 AND 1926

(Actual census of buses which represent approximately 80% of total is given in later pages under Common Carrier and Non-Common Carrier classifications. Totals compiled by "Bus Transportation" and National Automobile Chamber of Commerce.)

	AS OF JANUARY 1,	
	1925	1926
<b>Common Carrier Operations</b>		
Intrastate motor carriers.....	31,100	30,475
Interstate motor carriers.....	None	1,500
Electric railways and subsidiaries.....	3,000	5,150
Steam railroads and subsidiaries.....	N. C.	375
Total, common carrier operations.....	34,100	37,500
<b>Non-Common Carrier Operations</b>		
Hotel buses.....	1,000	1,000
Sightseeing and tour companies.....	1,500	2,500
Railroad terminal companies.....	250	250
Industrial uses.....	1,075	1,075
Schools (public and private).....	15,000	27,000
Other miscellaneous uses.....	.....	100
Total, non-common carrier operations.....	18,825	31,925
Total buses—estimated.....	52,925	69,425

N. C.—Not Classified.

## INDEPENDENT COMPANIES USING MORE THAN 100 BUSES (From "Bus Transportation")

Company and Address	No. of Routes	Miles	No. of Buses
CALIFORNIA TRANSIT CO. . . . .	1115	110	
W. E. Travis, Pres. 191 Market St., Oakland, Cal.			
MOTOR TRANSIT CO. . . . .	24	1155.8	150
O. R. Fuller, Pres. 220 E. Market St., Los Angeles, Calif.			
PICKWICK STAGES. . . . .	7	1500	150
C. F. Wren, Pres. 6th & Los Angeles St., Los Angeles, Calif.			
FLORIDAMOTORLINES, Inc. . . . .	1290	150	
R. Harte, Vice-Pres. 120 N. Narcissus St., West Palm Beach, Fla.			
CHICAGO MOTOR COACH CO. . . . .	20	130	412
J. Ritchie, Pres. 4533 Wilcox St., Chicago, Ill.			
DETROIT MOTOR BUS CO. . . . .	8	219	285
W. F. Evans, Pres. 212 Bagley Ave., Detroit, Mich.			
PEOPLES MOTOR BUS CO. . . . .	19	89	215
R. W. Meade, Pres. 585 Adelaide Ave., St. Louis, Mo.			
FIFTH AVENUE MOTOR COACH CO. . . . .	14	36	511
F. T. Wood, Pres. 805 W. 132nd St., New York, N. Y.			

## Electric Railways Using More Than 100 Buses

Company and Address	No. of Routes	Miles	No. of Buses
BOSTON ELEVATED RY. . . . .	25	49.17	149
LOS ANGELES RY. CORP. . . . .	10	32.2	109
Los Angeles, Calif.			
PACIFIC ELECTRIC RY. CO. . . . .	34	166.46	106
Los Angeles, Calif.			
PUBLIC SERVICE TRANSP. CO. . . . .	90	510	809
Newark, N. J.			
WISCONSIN MOTOR BUS LINES . . . . .	19	921	148
(Milwaukee Power & Light Co.)			

## Steam Railroads with More than 100 Buses

NEW ENGLAND TRANSP. CO. . . . .	15	777	125
(N. Y., N. H., & H. R. R.) New Haven, Conn.			
NORTHLAND TRANSP. CO. . . . .	....	....	143
(Great Northern Transit) Duluth, Minn.			

## Sightseeing Companies Operating More than 100 Buses

YELLOWSTONE PARK TRANSP. CO. . . . .	5	750	311
Harry W. Child, Pres. Mammoth Hot Springs, Wyo.			

# 232,000 Miles of Common 250 Electric Lines Now Use 6,455 Common Carrier Operators Have

(Figures compiled by Bus Transportation and

States	Motor Carriers (Intrastate)				Motor Carriers (Interstate)			
	No. of Cos.	Total No. Vehicles	No. Touring Cars	Miles of Routes	No. of Cos.	Total No. Vehicles	Miles of Routes	
1 Connecticut .....	63	286	37	995	8	27	601	
2 Maine .....	83	205	85	2,880	1	1	125	
3 Massachusetts .....	162	591	.....	2,440	17	93	1,973	
4 New Hampshire .....	54	83	5	883	3	4	.....	
5 Rhode Island .....	22	36	12	125	11	28	150	
6 Vermont .....	43	104	14	1,250	5	6	122	
<b>Total.....</b>	<b>427</b>	<b>1,305</b>	<b>153</b>	<b>8,573</b>	<b>45</b>	<b>159</b>	<b>2,971</b>	
7 Delaware .....	5	20	.....	80	.....	.....	.....	
8 District of Columbia ..	1	62	.....	15	3	24	.....	
9 Illinois .....	77	1,171	25	1,606	7	23	346	
10 Indiana .....	160	651	28	4,872	3	4	154	
11 Maryland .....	147	217	13	1,250	5	9	213	
12 Michigan .....	157	1,312	500	6,150	3	56	462	
13 New Jersey .....	73	1,125	334	1,505	40	104	980	
14 New York .....	451	1,600	42	10,560	1	2	38	
(Outside N. Y. City)								
New York City only ..	305	861	.....	169	4	19	341	
15 Ohio .....	434	1,160	163	10,440	4	18	149	
16 Pennsylvania .....	542	1,759	125	8,364	4	27	216	
17 Wisconsin .....	54	255	25	2,196	4	6	665	
<b>Total.....</b>	<b>2,406</b>	<b>10,193</b>	<b>1,255</b>	<b>47,287</b>	<b>78</b>	<b>292</b>	<b>3,564</b>	
18 Alabama .....	63	155	67	1,500	1	.....	.....	
19 Arkansas .....	69	275	91	4,494	.....	.....	.....	
20 Florida .....	74	492	12	3,700	.....	.....	.....	
21 Georgia .....	90	220	70	5,132	.....	.....	.....	
22 Kentucky .....	295	520	300	4,000	3	5	291	
23 Louisiana .....	47	524	.....	3,477	.....	.....	.....	
24 Mississippi .....	27	84	22	1,731	.....	.....	.....	
25 North Carolina .....	188	490	230	6,479	4	17	422	
26 South Carolina .....	29	139	125	2,108	.....	.....	.....	
27 Tennessee .....	158	340	125	4,500	2	63	500	
28 Virginia .....	175	400	117	4,821	4	8	.....	
29 West Virginia .....	79	225	42	1,887	2	15	200	
<b>Total.....</b>	<b>1,294</b>	<b>3,864</b>	<b>1,201</b>	<b>43,829</b>	<b>16</b>	<b>108</b>	<b>1,413</b>	
30 Idaho .....	64	184	93	3,837	.....	.....	.....	
31 Iowa .....	43	107	19	2,409	4	6	212	
32 Minnesota .....	70	325	2	2,500	2	6	.....	
33 Missouri .....	178	519	34	10,857	7	21	859	
34 Montana .....	28	121	76	3,700	1	.....	.....	
35 Nebraska .....	50	160	16	2,109	.....	.....	.....	
36 North Dakota .....	31	70	28	2,400	.....	.....	.....	
37 South Dakota .....	29	76	17	2,398	.....	.....	.....	
38 Wyoming .....	30	58	6	1,350	.....	.....	.....	
<b>Total.....</b>	<b>523</b>	<b>1,620</b>	<b>291</b>	<b>31,560</b>	<b>14</b>	<b>33</b>	<b>1,071</b>	
39 Arizona .....	70	180	18	4,056	.....	.....	.....	
40 Colorado .....	51	172	42	3,760	2	4	85	
41 Kansas .....	93	274	99	4,175	12	18	153	
42 Nevada .....	62	150	115	4,500	.....	.....	.....	
43 New Mexico .....	22	115	61	924	.....	.....	.....	
44 Oklahoma .....	146	235	150	12,000	6	9	35	
45 Texas .....	157	751	262	10,748	.....	.....	.....	
46 Utah .....	62	257	54	2,845	.....	.....	.....	
<b>Total.....</b>	<b>643</b>	<b>2,134</b>	<b>801</b>	<b>43,008</b>	<b>20</b>	<b>31</b>	<b>273</b>	
47 California .....	440	1,868	437	19,950	3	5	565	
48 Oregon .....	94	503	36	5,093	1	13	88	
49 Washington .....	146	537	126	5,991	4	18	1,445	
<b>Total.....</b>	<b>680</b>	<b>2,908</b>	<b>599</b>	<b>31,034</b>	<b>8</b>	<b>36</b>	<b>2,098</b>	
<b>Total United States..</b>	<b>5,993</b>	<b>22,024</b>	<b>4,300</b>	<b>205,211</b>	<b>181</b>	<b>659</b>	<b>13,396</b>	

# Carrier Bus Operations

## 5100 Buses on 5132 Miles of Route

### 28,145 Buses in Service Regularly

(National Automobile Chamber of Commerce)

Electric Railways or Subsidiaries			Steam Railroads or Subsidiaries			Total All Common Carriers			States
No. of Cos.	Total No. of Veh- icles	Miles of Route	Total No. of Cos.	Total No. of Veh- icles	Miles of Route	No. of Cos.	Total No. of Veh- icles	Miles of Route	
6	143	276	1	27	330.8	78	483	2,202.8	... Connecticut 1
2	7	52	1	2	44.0	87	215	3,101.0	... Maine 2
13	317	369	2	24	144.1	194	1,025	4,926.1	... Massachusetts 3
1	3	2	1	28	489.0	59	118	1,374.0	... New Hampshire 4
2	77	118	2	34	204.5	37	175	597.5	... Rhode Island 5
...	...	...	...	...	...	48	110	1,372.0	... Vermont 6
24	547	817	7	115	1,212.4	503	2,126	13,573.4	.....Total
1	45	41	..	..	..	6	65	121.0	..... Delaware 7
2	70	80	..	..	..	6	156	95.0	..... Dist. of Col. 8
21	189	494	1	1	10.0	106	1,384	2,456.0	..... Illinois 9
10	191	1,256	..	..	..	173	846	6,324.0	..... Indiana 10
3	134	1,552	..	..	..	155	360	3,015.0	..... Maryland 11
7	436	507	1	1	21.0	168	1,805	7,140.0	..... Michigan 12
8	879	795	..	..	..	121	2,108	3,280.0	..... New Jersey 13
17	180	379	..	..	..	469	1,782	10,977.0	..... New York 14
1	10	....	..	2	..	310	890	510.0	Outside N. Y. C.
16	469	775	1	2	8.0	455	1,649	11,372.0	N. Y. City only
28	399	789	1	1	15.0	575	2,186	9,384.0	..... Ohio 15
6	195	1,165	1	1	26.6	65	457	4,052.6	..... Pennsylvania 16
129	3,197	7,875	5	6	80.6	2,601	13,688	58,726.6	..... Wisconsin 17
3	17	5	2	4	30.0	67	163	1,531.0	.....Total
2	26	88	..	..	..	72	292	4,499.0	..... Alabama 18
5	34	28	1	1	..	76	518	3,788.0	..... Arkansas 19
2	24	28	2	2	10.0	96	255	5,160.0	..... Florida 20
2	22	12	..	..	..	302	551	4,329.0	..... Georgia 21
1	1	..	..	..	..	49	546	3,489.0	..... Kentucky 22
5	21	10	..	..	..	28	85	1,731.0	..... Louisiana 23
1	14	9	..	..	..	197	528	6,911.0	..... Mississippi 24
3	7	6	1	2	19.0	30	153	2,117.0	North Carolina 25
5	156	128	1	1	7.0	164	412	5,025.0	South Carolina 26
6	28	73	..	..	..	185	565	4,956.0	..... Tennessee 27
36	354	388	7	10	64.0	87	268	2,160.0	..... Virginia 28
1	2	.. 2	..	..	..	..	..	..	..... West Virginia 29
9	53	158	..	..	..	1,353	4,336	45,696.0	.....Total
3	108	150	2	113	2,292.3	65	186	3,839.0	..... Idaho 30
6	153	174	1	1	9.0	56	166	2,779.0	..... Iowa 31
2	6	10	..	..	..	77	552	4,942.3	..... Minnesota 32
1	14	650	..	..	..	192	794	11,899.0	..... Missouri 33
..	..	..	..	..	..	29	121	3,700.0	..... Montana 34
22	336	1,144	3	114	2,301.3	52	166	2,119.0	..... Nebraska 35
1	5	2	..	..	..	31	70	2,400.0	..... North Dakota 36
2	7	36	1	1	15.0	30	90	3,048.0	..... South Dakota 37
6	42	313	..	..	..	30	58	1,350.0	..... Wyoming 38
1	1	..	1	1	..	562	2,103	36,076.3	.....Total
4	55	55	..	..	..	72	185	4,058.0	..... Arizona 39
8	71	59	2	6	319.3	56	184	3,986.0	..... Colorado 40
2	3	54	1	44	160.0	111	334	4,641.0	..... Kansas 41
24	184	519	6	52	494.3	63	151	4,500.0	..... Nevada 42
15	380	290	..	..	..	23	116	924.0	..... New Mexico 43
2	25	33	1	30	155.0	156	299	12,090.0	..... Oklahoma 44
7	109	185	2	3	179.0	167	828	11,125.3	..... Texas 45
24	514	598	3	33	334.0	65	304	3,059.0	..... Utah 46
250	5,132	12,378	31	330	4,488.6	715	3,491	33,974.0	.....Total
						6,455	28,145	232,340.6	..... California 47
									..... Oregon 48
									..... Washington 49

# NON-COMMON CARRIER BUS OPERATIONS

26,751 Used by Consolidated Rural Schools

691,000 Children Transported by Motor Daily

Sightseeing Buses Total 1,981; Hotels Use 539

(Totals compiled by National Automobile Chamber of Commerce and "Bus Transportation")

State	SCHOOL BUSES				
	Number Consolidated Schools Reported	Number Children Carried by Motor Vehicles	Number Motor Buses Used	Number Hotel Buses	Number Sightseeing Buses
Alabama.....	450	18,950	590*	6	1
Arizona.....	3	188	7	9	31
Arkansas.....	140	1,625	70	31	1
California.....	154	35,116	1,496	21	228
Colorado.....	146	14,250	500*	13	119
Connecticut.....	56	8,400	400*	3	18
Delaware.....	36	2,147	78*	...	3
Florida.....	150	9,860	328	50	250
Georgia.....	612	15,838	453	3	3
Idaho.....	15	1,009	381*	3	...
Illinois.....	123	2,175	89	23	75
Indiana.....	844	47,203	1,886	17	10
Iowa.....	388	28,350	1,134	20	...
Kansas.....	170	7,254	357*	5	...
Kentucky.....	118	7,500	143*	4	10
Louisiana.....	1,220	46,173	1,487*	1	6
Maine.....	96	680	31	28	3
Maryland.....	63	4,445	157	1	24
Massachusetts.....	93	20,000	800*	8	97
Michigan.....	247	6,810	226*	16	45
Minnesota.....	347	29,772	342*	38	...
Mississippi.....	862	71,739	1,959*	5	...
Missouri.....	232	2,000	31*	23	3
Montana.....	90	...	677	2	44
Nebraska.....	98	3,042	156*	1	...
Nevada.....	9	500	50	...	...
New Hampshire.....	8	516	27	23	...
New Jersey.....	200	19,641	494	74	34
New Mexico.....	54	4,000	155	...	...
New York.....	541	4,260	213	18	392
North Carolina.....	798	65,000	2,500	2	...
North Dakota.....	509	14,604	1,008*	...	...
Ohio.....	1,023	47,900	2,395	34	15
Oklahoma.....	408	29,536	923*	...	...
Oregon.....	95	2,000	100*	3	249
Pennsylvania.....	451	19,200	384*	7	35
Rhode Island.....	11	465	18	...	6
South Carolina.....	1,536	9,097	368*	4	5
South Dakota.....	55	2,891	115	...	...
Tennessee.....	667	12,400	298*	...	10
Texas.....	874	14,679	571*	...	...
Utah.....	141	8,558	118	...	75
Vermont.....	50	2,000	85	17	...
Virginia.....	359	16,000	798*	5	3
Washington.....	344	20,000	895*	...	...
West Virginia.....	300	4,000	588	...	...
Wisconsin.....	75	4,750	675*	21	...
Wyoming.....	71	4,500	195*	...	300
Totals**.....	15,432	691,023	26,751	539	1,981

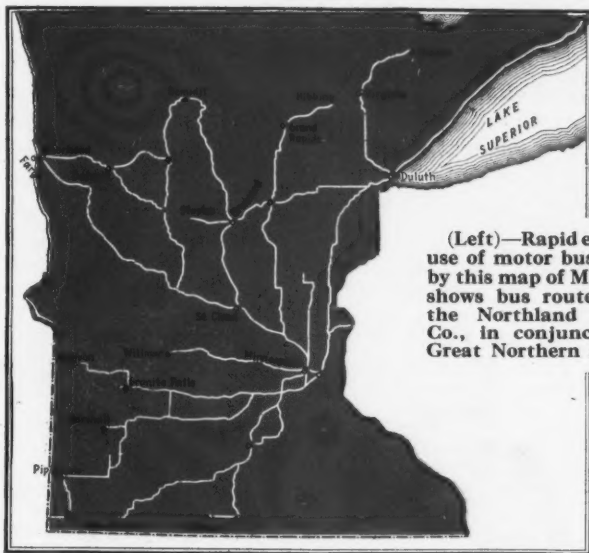
\*Indicates State Figure, others are partial returns from Counties reporting.

†Includes 102 Buses in District of Columbia.

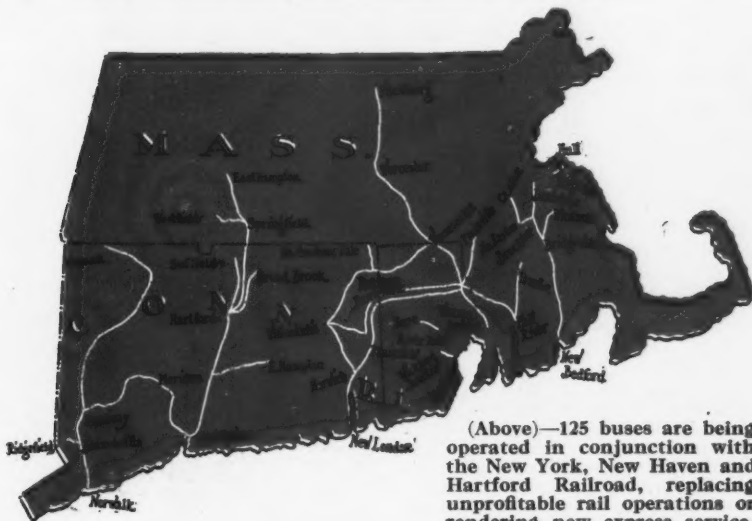
\*\*In addition there are 185 railroad transfer terminal buses, and 215 industrial buses.

## RAIL LINES EXTEND BUS SERVICE

(Maps by courtesy of "Bus Transportation")



(Left)—Rapid extension of the use of motor buses is indicated by this map of Minnesota which shows bus routes operated by the Northland Transportation Co., in conjunction with the Great Northern Railway Co.



(Above)—125 buses are being operated in conjunction with the New York, New Haven and Hartford Railroad, replacing unprofitable rail operations or rendering new express service.





## 14,000 Miles of Bus Routes Operated by Electric Railway

2,000 Miles Replaces Tracks

	Number of Companies	Approximate Miles of Track
Substitution by buses for part of rail system.....	79	725
Substitution by buses for entire rail system with service now rendered by <i>same company</i> .....	30	395
Substitution by buses for entire rail system with service now rendered by <i>separate company</i> .....	67	880
<b>Total</b> .....	<b>176</b>	<b>2,000*</b>
Track abandoned and no service now rendered.....	54	500

\*—Does not include 12,000 miles of bus operation by electric railroads over routes not formerly served by them.

## Bus Routes 31% Non-Competitive with Railroads in 8 States

(Figures from U. S. Bureau of Public Roads)

STATE	DIRECTLY COMPETITIVE (Parallel)				INDIRECTLY COMPETITIVE (Between same towns)			
	ROUTES Number	Per cent	LENGTH Miles	Per cent	ROUTES Number	Per cent	LENGTH Miles	Per cent
Connecticut..	23	43	463	50	17	32	311	34
N. Hampshire	7	22	60	19	6	19	91	30
W. Virginia..	23	38	262	29	30	49	591	60
Kentucky....	70	37	1,588	41	40	21	1,074	28
Arizona.....	10	26	728	31	14	36	1,061	45
Oregon.....	31	38	1,916	51	11	14	355	10
Washington..	67	39	1,730	40	23	23	1,123	25
<b>Total</b> .....	<b>231</b>	<b>37</b>	<b>6,767</b>	<b>41</b>	<b>158</b>	<b>25</b>	<b>4,606</b>	<b>28</b>

STATE	NON-COMPETITIVE				TOTAL			
	ROUTES Number	Per cent	LENGTH Miles	Per cent	ROUTES Number	Per cent	LENGTH Miles	Per cent
Connecticut..	13	25	150	16	53	100	924	100
N. Hampshire	19	59	160	51	32	100	311	100
W. Virginia..	8	13	114	11	61	100	987	100
Kentucky....	79	42	1,214	31	189	100	3,876	100
Arizona.....	15	38	569	24	39	100	2,358	100
Oregon.....	39	48	1,468	39	81	100	3,739	100
Washington..	64	38	1,536	35	171	100	4,379	100
<b>Total</b> ...	<b>237</b>	<b>38</b>	<b>5,201</b>	<b>31</b>	<b>626</b>	<b>100</b>	<b>16,574</b>	<b>100</b>

### NUMBER AND LENGTH OF MOTOR BUS ROUTES

State	Number routes	Total length	Average length
Connecticut...	53	924 mi.	17.4 mi.
New Hampshire.	32	311	9.7
West Virginia...	61	987	16.2
Kentucky.....	189	3,876	20.5
Arizona.....	39	2,358	60.5
Oregon.....	81	3,739	46.1
Washington....	171	4,379	25.6
Maryland.....	79	1,622	20.6
<b>Total</b> .....	<b>705</b>	<b>18,196</b>	<b>25.8</b>

<sup>1</sup> The total number of routes in the State is 189. Mileage data are available for only 171.

### MOTOR BUS ROUTES AND RAILROAD MILEAGE

State	Railroad mileage Miles	Bus route mileage Miles	Ratio of bus to R. mileage %
Conn.....	1,003	1,822	82%
N. H.....	1,239	311	25
W. Va....	4,057	987	24
Ky.....	3,955	3,876	98
Ariz.....	2,452	2,358	96
Ore.....	3,347	3,739	111
Wash....	5,494	4,379	80
Md.....	1,447	1,622	112
<b>Total</b> ...	<b>22,994</b>	<b>18,094</b>	

<sup>1</sup> This is the net mileage of highways used by motor buses; lines having a total length of 102 miles use highways used by other lines.



## Common Carrier Trucks Pay More Than Double Private Carrier Taxes

### License Fees for Common Carrier Four Times as Large

License fees charged by 25 states for a 3-ton truck of given specifications\* when used as a common carrier and a private carrier.

(Figures from U. S. Bureau of Public Roads)

	License fee as a common carrier	License fee as a private carrier	Fee in Excess of private carrier		License fee as a common carrier	License fee as a private carrier	Fee in Excess of private carrier
Arizona.....	\$120.00	\$15.00	\$105.00	Oregon.....	45.00	35.00	10.00
Arkansas.....	187.50	125.00	62.50	S. Carolina...	150.00	60.00	90.00
California....	498.00	18.00	480.00	S. Dakota....	360.00	75.00	285.00
Idaho.....	600.00	65.00	535.00	Utah.....	400.00	40.00	360.00
Illinois.....	205.00	75.00	130.00	Virginia.....	520.00	60.00	460.00
Iowa.....	425.00	100.00	325.00	Washington...	209.00	25.50	183.50
Kansas.....	185.00	45.00	140.00	West Virginia.	150.00	56.25	93.75
Maryland....	433.33	9.60	423.73				
Michigan.....	157.50	87.50	70.00	Average.....	\$276.34	\$64.03	\$212.31
Minnesota....	450.00	108.00	342.00	Average common carrier li-			
Mississippi...	123.75	82.50	41.25	cense fee.....			\$276.34
Montana.....	47.50	37.50	10.00	Average gasoline tax cost.....			105.60
Nevada.....	480.00	39.00	441.00				
New Mexico...	70.00	30.00	40.00	Total average annual tax on			
N. Carolina...	720.00	200.00	520.00	3-ton common carrier.....			\$381.94
N. Dakota....	132.00	82.00	50.00	Total average annual tax on			
Ohio.....	140.00	70.00	70.00	3-ton private carrier.....			\$169.63
Oklahoma....	100.00	60.00	40.00				

\*Pneumatic tires; weight, 7,000 pounds; capacity, 6,000 pounds; 30 horse power; value, \$4,500; annual gross receipts, \$12,000; total annual mileage, 20,000 miles; total tire width, 20 inches; total annual gasoline consumption, 4,000 gallons.

### MOTOR-BUS TAXES

State	Annual license fee	Caso- line tax	Personal- property tax in Total addition
Conn.....	\$82.50	\$71.42	\$153.92 Yes
N. H.....	276.00	142.84	418.84 Yes
W. Va....	666.67	249.97	916.64 Yes
Ky.....	270.00	214.26	484.26 Yes
Ariz.....	25.00	214.26	239.26 No data
Ore.....	177.00	214.26	391.26 No
Wash....	250.00	142.84	392.84 Yes
Md.....	1,428.57	142.84	1,571.41 Yes
Average.	\$396.96	\$174.09	\$571.05 .....

### BUS FARES

Rate of fare per mile, cts.	Connect-icut routes	New Hampshire routes	Maryland routes
	No.	No.	No.
2 to 3..	2 4.2	1 3.1	1 3.1
3 to 4..	7 14.9	4 12.5	6 18.8
4 to 5..	21 44.7	3 9.4	11 34.4
5 to 6..	11 23.4	7 21.9	13 40.6
6 to 7..	3 6.4	2 6.3	1 3.1
7 to 8..	3 6.4	1 3.1	...
8 to 9..	...	1 3.1	...
9 to 10..	...	4 12.5	...
10 to 11..	...	2 6.3	...
12 to 13..	...	5 15.6	...
15 to 16..	...	1 3.1	...
18 to 19..	...	1 3.1	...



Route of 30 motor buses used by Spokane, Portland and Seattle Railway is shown by the white lines. These buses carried 334,406 revenue passengers in 1925. The length of route is 125 miles. The average miles per passenger carried was 29.99.



## Steam Railroad Use of Motor Vehicles

- 51 Railroads in the United States and Canada are now using motor trucks to supplement their shipping service.
- 17 Railroads are studying the possibilities of transporting freight by truck, contemplating either the use of trucks for the first time or the use of additional trucks.
- 31 Steam railroads, or their subsidiaries, use over 407 motor buses. Most of these have begun to carry passengers on the highways within the last year.
- 22 Steam railroads not using buses are considering the installation of bus service.
- 190 Steam and electric railroads in the United States and Canada are using over 496 gasoline or gas-electric rail motor coaches. Twenty-six of these lines consider using additional equipment of this type, and have already ordered 38 more units.
- 18 Steam and electric railroads not now having rail motor coaches are investigating their use.

## Railroad Use of Motor Trucks

### 37 for Terminal Movement—10 to Replace Local Freight Trains— 10 for Store Door Delivery

†Michigan Central Railroad	S.D.	*Delaware, Lackawanna & Western Railroad
*Boston & Albany Railroad		*Great Northern Railway
†Buffalo, Rochester & Pittsburgh Railway Company	S.D.	†Long Island Railroad
S.D. Canadian National Railways		*Maine Central Railroad
S.D. †Lehigh Valley Railroad Company		*New York, New Haven & Hartford Railroad
S.D. *Erie Railroad	S.D.	Oklahoma, New Mexico & Pacific Railroad
†New York Central Railroad Company	S.D.	*Southern Pacific Company
†Pecos Valley Southern Railway	S.D.	Tennessee Central Railway
†Pennsylvania Railroad System		*Verde Tunnel & Smelter Railroad
S.D. *Boston & Maine Railroad		*Bellefonte Central Railroad
S.D. Cincinnati, Georgetown & Portsmouth Railroad		†New York, Ontario & Western Railway

(Continued from preceding page)

\*Baltimore & Ohio Railroad Company  
 \*Cleveland, Cincinnati, Chicago & St. Louis  
 Railway Co.  
 \*Chesapeake & Ohio Railway  
 \*Louisville & Nashville Railroad  
 \*Pennsylvania Railroad System  
 \*Southern Railway System  
 \*Norfolk & Western Railway Company

Contract with Cincinnati Motor Terminals Co.,  
 for truck service at Cincinnati.

S.D. † \*Baltimore & Ohio Railroad Co.  
 \*Chicago, Burlington & Quincy R. R. Co.  
 \*Chicago & Alton Railroad  
 \*Chicago & Eastern Illinois Railway Co.  
 † \*Chicago, Rock Island & Pacific Railway  
 \*Cleveland, Cincinnati, Chicago & St. Louis  
 Ry.  
 \*East St. Louis, Columbia & Waterloo Ry.  
 \*Frisco Lines  
 \*Illinois Central Railroad  
 \*Illinois Traction System (Elec.)  
 \*Louisville & Nashville Railroad  
 \*Louisville, Henderson & St. Louis Railway  
 \*Missouri-Kansas-Texas Lines  
 \*Missouri Pacific Railroad  
 \*Mobile & Ohio Railroad  
 \*New York, Chicago & St. Louis Railroad  
 Co.  
 \*Pennsylvania Railroad System  
 \*St. Louis Southwestern Railway Lines  
 \*Southern Railway System  
 \*Wabash Railway Company  
 \*Chicago, Peoria & St. Louis Railroad  
 \*Litchfield & Madison Railway  
 \*St. Louis, Troy & Eastern Railroad

Contract with Columbia Terminals Company  
 for truck service at St. Louis and East St.  
 Louis.

\*For terminal movement.

†To replace local freight trains.

S.D. For store-door delivery.

Note—All the above railroads contract with trucking firms, except the Pecos Valley Southern; Boston & Albany; Maine Central; Oklahoma New Mexico & Pacific; Bellefonte Central, which own their trucks; Canadian National Railways; Cincinnati, Georgetown & Portsmouth; New York, New Haven & Hartford. Verde Tunnel & Smelter Railroad and the Baltimore & Ohio both own trucks and contract for their use. The Boston & Maine rents trucks from independent operators.

## 31 Steam Railroads Use Buses Directly or Through Subsidiaries

No. Buses	Name of Railroad	No. Buses	Name of Railroad
2	Alabama, Tennessee & Northern R. R.	30†	Spokane, Portland & Seattle Railroad (Owns through subsidiary)
3	Atchison, Topeka & Santa Fe R. R.	1	Stewartstown Railroad
31 *N. R. †	Boston & Maine Railroad (Rents buses to subsidiary)	5†	Tama & Toledo Railroad (Owns its buses)
1†	Cadiz Railroad	2 *N. R. †	Tennessee, Kentucky & Northern Rail- road (Officials of the Railroad own buses)
3	Canadian Pacific Railway (Buses owned by subsidiary — Canadian Pacific Transport Co.)	1	Tuckasegee & South Eastern Railway
1	Chicago, Burlington & Quincy Railroad	44	Union Pacific Railway
3†	Chicago, Milwaukee & St. Paul Railway (Both owns and contracts)	1†	Verde Tunnel & Smelter Railroad (Con- tracts for bus service)
1	Copper Range Railroad	1	Virginia & Truckee Railway
1	Franklin & Pittsylvania Railway	1	Wabash Railway
143	Great Northern Railway (Owns buses through subsidiary bus companies)	1	Washington, Brandywine & Point Look- out Railroad
2	Gulf, Mobile & Northern Railroad		
3	Kansas City, Mexico & Orient Railroad		
2†	Maine Central Railroad (Owns it buses)		
3	Minnesota Western Railroad		
1	Narragansett Pier Railroad		
125†	New York, New Haven & Hartford Railroad (Owns through subsidiary bus company)	40†	<b>Total Buses Tabulated</b>
3†	Quebec, Montreal & Southern Railroad	3*	On routes substituted for branch lines.
2	Richmond, Fredericksburg & Potomac Railroad	10†	On road paralleling rail lines.
1	San Luis Central Railroad	2	N. R. On new feeder routes.
1	Shelby County Railway		
2	Southern Railway System		

Note—The following railroads are reported to  
 have made working arrangements for handling  
 passenger traffic with motor carrier lines:  
 Baltimore, Chesapeake & Atlantic Railroad  
 New York, Ontario & Western Railway  
 Southern Pacific Railroad  
 Wilmington, Brunswick & Southern Railroad.

# MOTOR TRUCK FLEETS BY STATES

*Classified by 3 plus, 5 plus, and 10 or more*

*(Figures as of July 1, 1925, from Reuben H. Donnelley Corporation)*

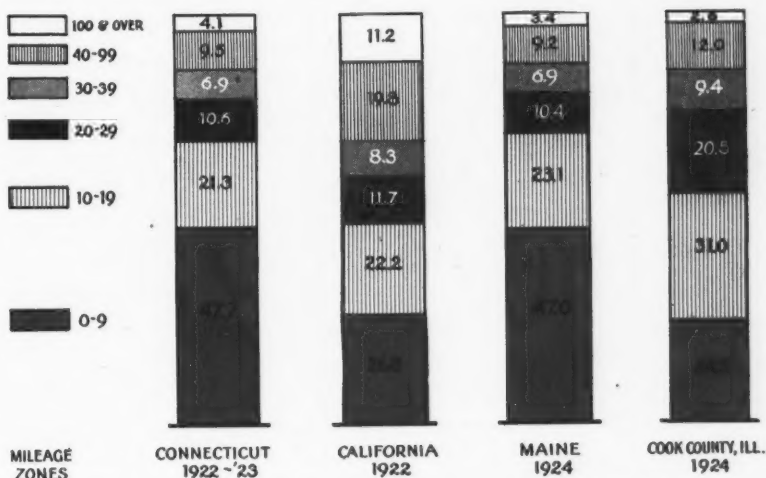
States	3 or more	5 or more	10 or more	States	3 or more	5 or more	10 or more
Alabama.....	904	258	52	Nevada.....	109	24	5
Arizona.....	334	113	32	New Hampshire.....	162	39	6
Arkansas.....	781	232	46	New Jersey.....	4,944	1,530	373
California.....	6,919	2,700	885	New Mexico.....	34	9	3
Colorado.....	685	270	76	New York (omit Greater New York).....	4,299	1,322	289
Connecticut.....	1,544	474	136	Greater New York.....	4,207	1,619	562
Delaware.....	217	60	15	North Carolina.....	1,014	350	103
District of Columbia.....	585	278	126	North Dakota.....	197	25	4
Florida.....	1,669	564	145	Ohio.....	5,593	1,550	490
Georgia.....	1,112	324	76	Oklahoma.....	1,353	448	111
Idaho.....	115	32	6	Oregon.....	651	229	62
Illinois (omit Chicago).....	3,259	2,032	210	Pennsylvania.....	6,896	2,337	576
Chicago.....	2,446	1,117	207	Rhode Island.....	846	285	73
Indiana.....	2,592	797	204	South Carolina.....	698	207	32
Iowa.....	1,282	371	67	South Dakota.....	116	27	2
Kansas.....	1,090	321	60	Tennessee.....	914	335	94
Kentucky.....	928	285	78	Texas.....	2,427	855	216
Louisiana.....	1,196	443	111	Utah.....	376	144	46
Maine.....	511	107	24	Vermont.....	161	34	6
Maryland.....	1,271	423	132	Virginia.....	1,409	387	109
Massachusetts.....	3,790	1,273	353	Washington.....	1,205	465	124
Michigan.....	2,624	977	308	West Virginia.....	1,074	369	85
Minnesota.....	2,019	672	180	Wisconsin.....	2,030	639	155
Mississippi.....	504	128	10	Wyoming.....	157	54	11
Missouri.....	1,802	614	164				
Montana.....	309	103	16	Total United States..	82,165	28,526	7,344
Nebraska.....	805	275	88				

## Leading Truck Fleets in the U. S. A.

*(Figures from "Operation and Maintenance," formerly "Motor Transport")*

American Railway Express, 2 Rector St., New York City (All Branches).....	5,753	Dept. of Street Cleaning, New York City.....	904
Post Office Department, 11th & Penna. Ave., Washington, D. C. (All Branches).....	5,300	Standard Oil Co. of New York... ..	842
Standard Oil Co. of Indiana, 910 S. Michigan Ave., Chicago, Ill. (All Branches).....	3,500	New York Fire Dept., New York City.....	800
Armour & Co., Union Stock Yards, Chicago, Ill., (All Branches)	3,374	California Highway Commission, 1805 34th Street, Sacramento, Cal.....	800
Gulf Refining Company.....	2,005	Chas. D. Farmer, Raleigh, N. C.	800
Street Cleaning Department, 366 Flushing Ave., Brooklyn, N. Y.	1,800	New England Tel. & Elec. Co., Boston, Mass.....	780
Swift & Company, Union Stock Yards, Chicago, Ill.....	1,500	Union Oil Co. of California.....	759
Liggett & Myers Tobacco Co., 212 Fifth Ave., New York City	1,262	Wisconsin Highway Commission, State Capitol Annex, Madison, Wis.....	608
Associated Belle Telephone Companies.....	1,183	General Baking Co., New York City.....	600
Standard Oil Co. of New Jersey, Baltimore, Md.....	997	Texas Co., New York City.....	508
Penna. Dept. of Highways, Harrisburg, Pa.....	921	Great Atlantic & Pacific Tea Co., New York City.....	463
		Cocoa Cola Bottling Company..	353
		N. Y. Telephone Co., New York	350
		Tidewater Oil Co., New York...	308

## Trucks Operate Chiefly in Short Haul Field



### MILEAGE ZONES—LOADED MOTOR TRUCKS

(Figures from U. S. Bureau of Public Roads)

Mileage Zones	CONNECTICUT 1922-1923	CALIFORNIA† 1922	MAINE 1924	COOK COUNTY, ILL. 1924
	Percentage of Loaded Trucks	Percentage of Loaded Trucks	Percentage of Loaded Trucks	Percentage of Loaded Trucks
0-9 mi.	47.7%	26.8%	47.0%	24.3%
10-19	21.3	22.2	23.1	31.0
20-29	10.6	11.7	10.4	20.5
30-39	6.9	8.3	6.9	9.4
40-49	2.9	5.5	4.1	6.6
50-59	2.8	6.5	1.9	2.8
60-69	1.3	4.7	1.2	1.1
70-79	1.5	...	0.8	0.6
80-89	0.5	3.1	0.7	0.4
90-99	0.5	...	0.5	0.5
100 and over	4.1	11.2	3.4	2.8

†California data limited to important highways upon which percentage of long haul trucking is greater than upon all highways in the state.

### TRUCKS NOT COMPETING WITH RAILROADS

One thing we know very definitely—there is no basis for the fear that the motor truck is going to compete seriously with the railroads. The facts we have found in all our surveys are sufficient to convince me. The truck has found its place in the short haul, and it is not taking over any business that the railroads can do as well or better.—WILLIAM M. JARDINE, Secretary of Agriculture.

### 62 MOTOR TRANSPORT LINES IN WISCONSIN

Wisconsin has sixty-two different companies and individuals operating inter-urban lines, ten companies operating urban bus lines, and eight or ten running freight lines according to P. H. Porter, attorney for the state railroad commission.—*Automotive Daily News*.

# Data on the Electric Truck Industry

*Compiled in Collaboration with Society for Electrical Development)*

## LIFE OF ELECTRIC TRUCKS IN NEW YORK CITY

The following table from the Society for Electrical Development gives the ages of electric trucks over seven years old used in the City of New York:

Over 7 years.....	2,899
Over 8 years.....	2,448
Over 9 years.....	2,044
Over 10 years.....	1,580
Over 11 years.....	1,285
Over 12 years.....	980
Over 13 years.....	395
Over 14 years.....	221
Over 15 years.....	156
Over 16 years.....	132
Over 17 years.....	116
Over 18 years.....	74
Over 19 years.....	33
Over 22 years.....	25

## SAVING IN MILK DELIVERY

In retail delivery of milk the electric truck saves an hour's time for every 600 homes served over the horse drawn vehicle.

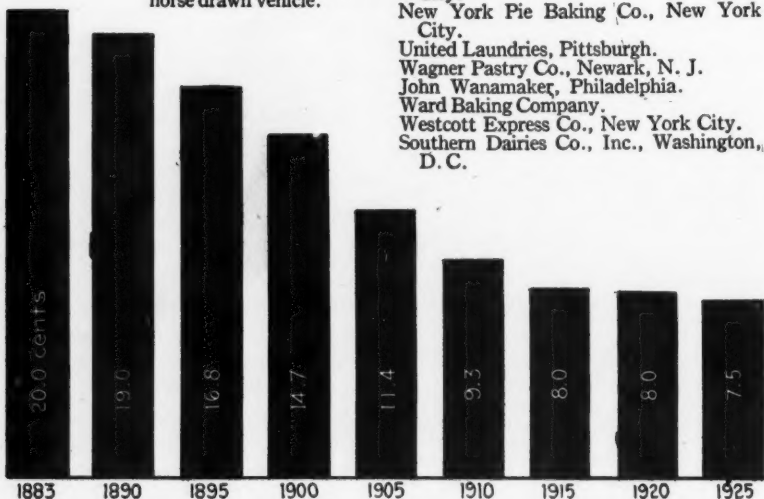


Chart by Courtesy of "Electrical World"

Operation cost of the electric truck is constantly decreasing as the cost of electric current declines. Chart shows price of current per k. w. h.

## ELECTRIC TRUCK FLEETS OF 50 OR MORE

*(Number of Electric Trucks Used by Following Companies Varies from 50 to 1,500)*

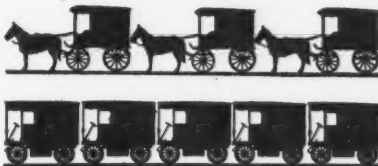
American Railway Express.  
Bush Terminal Company, New York City.  
Laundry & Dry Cleaning Service, Inc., New Orleans, La.  
Commonwealth Edison Co., Chicago.  
Consolidated Gas Company, New York City.  
General Baking Corporation.  
Cushman's Sons Company, New York City.  
Gimbel Brothers, New York City.  
James A. Hearn, New York City.  
Gottfried Baking Company, New York City.  
National Baking Company, Columbus, O.  
Los Angeles Creamery Co., Los Angeles.  
National Dairy Products, New York City.  
R. H. Macy & Company, New York City.  
Marshall Field & Company, Chicago.  
Continental Baking Corp., New York City.  
National Biscuit Company.  
New York Edison Company, New York City.  
New York Pie Baking Co., New York City.  
United Laundries, Pittsburgh.  
Wagner Pastry Co., Newark, N. J.  
John Wanamaker, Philadelphia.  
Ward Baking Company.  
Westcott Express Co., New York City.  
Southern Dairies Co., Inc., Washington, D. C.

## LESS FLOOR SPACE THAN HORSES

As the chart (right) indicates, the American Railway Express Company has recently replaced 168 horse-drawn vehicles, requiring 300 horses, with 84 electric trucks. The 168 horse-drawn vehicles had an aggregate carrying capacity of 540 tons, an average of 3.2 tons for each. The 84 electric vehicles had an aggregate capacity of 420 tons, an average of 5 tons for each—the electric, of course, possessing much higher capacity in the way of speed and mileage. The former horse-drawn vehicles required, for all purposes, 69,200 square feet of floor area; the 84 electrics occupied 21,000 square feet of area, mater-

## A VITAL DIFFERENCE

Space Occupied by Horses and Wagons  
Compared with Electric Trucks



ially less than one-third of that required for the former service.

## 5,000,000 FEWER HORSES

U. S. Department of Agriculture reported in March, 1926, that the total number of horses in the country decreased five millions during the preceding 10 years.

### NEW YORK CITY

1917—Horses.....	108,036
1924—Horses.....	50,053

### CHICAGO

1910—Horses.....	80,000
1924—Horses.....	30,000

## SEVEN REASONS WHY ELECTRICS SERVE MORE EFFICIENTLY THAN HORSES

1. Always in service.
2. Take less space.
3. Move more quickly.
4. Cleaner.
5. Have more endurance.
6. Lower ton-mile cost.
7. Adapted to City Service.

## 375,381 Head of Live Stock Hauled Over Highways to South St. Paul Yards

(Figures published in Highway News Service from data of Union Stockyards Company)

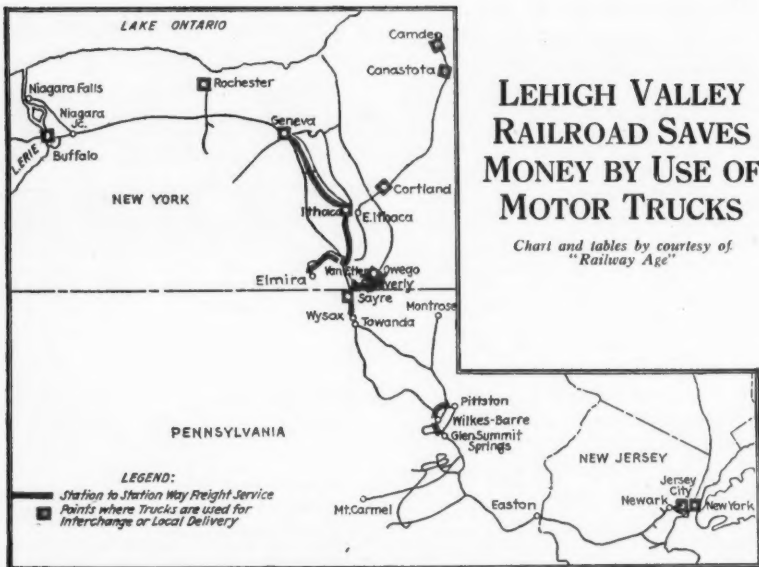
Stock	1900	1919	1924	1925
Cattle.....	5,497	17,384	33,708	50,643
Calves.....	414	7,127	47,831	76,623
Hogs.....	5,484	26,689	150,614	218,640
Sheep.....	4,671	3,545	21,572	29,975
<b>Totals.....</b>	<b>16,066</b>	<b>54,745</b>	<b>253,725*</b>	<b>375,381**</b>

\*Hauled in 34,431 motor truck loads.

\*\*Hauled in 47,337 motor truck loads.

The railways gain much more from the freight traffic it (the automobile industry) gives them than they lose from the freight and passenger business it takes away.  
—RALPH BUDD, President, Great Northern R. R.





Adoption of motor transportation by railroads is becoming an increasingly popular method of reducing overhead costs. Map and tables on these two pages are typical illustrations of the savings resulting from this process in short haul L. C. L. operations.

**TABLE I**  
**Statement of savings on Seneca and Auburn divisions account operation of motor truck handling L. C. L. freight between Elmira and Ithaca**

MONTH OF JANUARY, 1926

	Monthly Saving
<b>Seneca Division</b>	
Elimination of 1 hour overtime on No. 133's crew 31 days at \$6.93 per day	\$214.83
Elimination one trainman on No. 133's crew, 31 days at \$5.24 a day	162.44
Saving in handling 30 tons L. C. L. on truck formerly handled at Sayre	14.58
<b>Total Seneca Division</b>	<b>\$391.85</b>
<b>Auburn Division</b>	
Elimination of one trainman on Shine Line crew 26 days at \$6.16 per day	\$160.16
Elimination of one trainman on Cortland-Van Etten local freight (26 days at \$5.24)	136.24
Elimination one hour overtime to crew of Shine Line (26 days at \$6.10 per day)	158.60
Elimination one hour overtime to crew of Cortland-Van Etten local (26 days at \$6.67 per day)	173.42
	<b>\$628.42</b>

<i>Saving in Car Days</i>	
Elmira-Ithaca Car, 9 cars at 2 days per car.....	\$18.00
Newfield & way local—Ithaca 11 cars at 3 days per car.....	33.00
Van Etten & way local—Sayre 13 cars at 3 days per car.....	39.00
Elmira Hts. & way—Elmira 23 cars at 2 days per car.....	46.00
136 car days at \$1 per day.....	\$136.00
Grand Total.....	\$1,156.27
<i>Operation Motor Truck</i>	
Pieces 4053, 298,701 lb., Rev. \$1,251.71	
Cost motor truck.....	936.00
Net saving.....	\$220.27

TABLE II

*Savings effected on Seneca division by installation of motor truck service between Sayre, Waverly and Wysox*

MONTH OF JANUARY, 1926

Abolition of Sayre-Wysox turn-around run.....	\$1,889.68
26 days at \$72.63 per day	
Wages of crew \$36.28	
Loco. exp. 40 mi. at 91 c. per mi. \$36.40.	
Saving of 37 cars at Sayre tfr. 2 days per car, 74 car days.....	74.00
Saving of 22 cars at DLW Waverly, 1 day per car, 22 car days.....	22.00
Saving of 17 cars at Towanda Wash St., 3 days per car, 51 car days..	51.00
Saving in per diem of 26 cars del. Erie R. R. 1 day per car, 26 car days	26.00
Saving of 9 cars handled at Wash st. from S. L. & S. and S. & N. Y.	
1 car per day, 9 car days.....	9.00
Total.....	\$2,071.68
Less cost of motor truck.....	825.00
Actual saving.....	\$1,246.68
Handled 9,076 pieces      586,444 lb.      \$2,622.79 Revenue.	

TABLE III

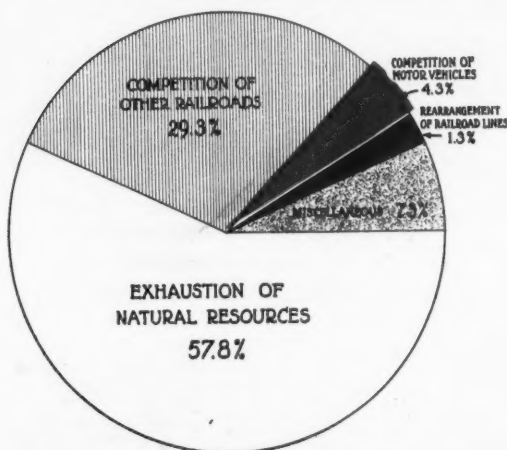
*Savings effected on Seneca Division by installation of motor truck service between Geneva and Ithaca*

MONTH OF JANUARY, 1926

Abolition of Ithaca branch local freight.....	\$3,342.04
26 days at \$128.54 per day	
Wages of crew, \$58.47	
Loco. exp. 77 miles at 91 cents per mile \$70.07	
Saving of 27 cars at Manchester Tfr. (ftr. for Old Road points now being loaded in the Geneva car and trucked from Geneva) and 33 cars at Geneva or a total of 60 cars, 3 days per car—180 car days	180.00
Saving of 17 cars at Ithaca which originally were loaded to Old Road points 3 days per car—51 car days.....	51.00
Total.....	\$3,573.04
Less cost of operation of motor truck.....	1,144.00
Actual saving.....	\$2,429.04
Tonnage handled, 314,189 lb.      Pieces, 4,599.      Gross rev. \$1,080.72	

# Rail Mileage Abandonment

*Motor Competition Causes Only 4%*



## RAIL MILEAGE ABANDONMENTS, 1916-1925—I. C. C. FIGURES

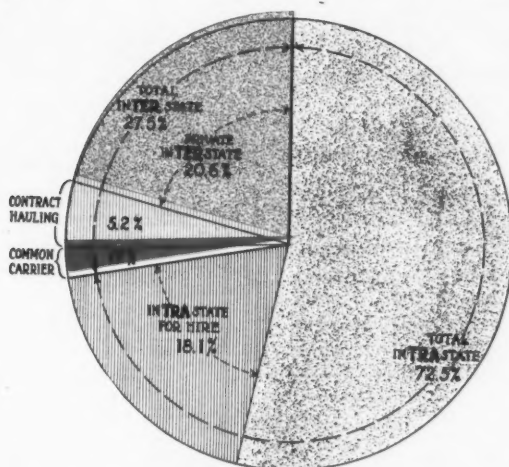
Cause	Number of Railroads	Percentage of number Per Cent	Length Miles	Percentage of Length Per cent
Exhaustion of natural resources.....	78	65.0	1,411.20	57.8
Competition of other railroads.....	14	11.7	713.34	29.3
Competition of motor vehicles.....	10	8.4	104.46	4.3
Rearrangement of lines of railroad.....	5	4.1	32.64	1.3
Miscellaneous.....	13	10.8	177.31	7.3
<b>Total.....</b>	<b>120</b>	<b>100.0</b>	<b>2,438.95</b>	<b>100.0</b>

## 1925 Best Year in Rail History

(Figures from Bureau of Railway Economics)

REVENUE CARLOADINGS		PASSENGER MILES	
1925.....	51,178,000	1925.....	35,900,000,000
1924.....	48,534,000	1924.....	36,126,100,000
1923.....	49,812,000	1923.....	38,008,000,000
1920.....	45,118,000	1920.....	46,848,000,000
NET TON-MILES		TOTAL OPERATING REVENUES	
1925.....	456,000,000,000	1925.....	\$6,187,000,000
1924.....	429,453,000,000	1924.....	5,921,490,100
1923.....	457,607,000,000	1923.....	6,289,580,000
1920.....	449,125,000,000	1922.....	5,559,092,027
		1921.....	5,516,598,242
		1920.....	6,178,438,459

# Analysis of Motor Truck Traffic



Analysis of motor truck traffic as shown on the chart above is based on the 3,450,000 tons checked in Connecticut, Sept., 1922, to Sept., 1923, by the U. S. Bureau of Public Roads and the State highway department. While figures in other surveys vary from the above, as other tables on this page indicate, it will be noted that elsewhere, as here, the vast majority of truck traffic is by private operators, and that of the "for hire" classification a high percentage is on the contract basis.

## CONNECTICUT TRUCK TRAFFIC\*

	Tons	Per cent		Tons	Percent
Total.....	3,450,000	100.0	InTERstate For Hire	238,000	6.9
InTRAstate.....	2,500,000	72.5	Contract Hauling..	178,000	5.2
InTERstate.....	950,000	27.5	Common Carrier..	60,000	1.7
Total For Hire.....	860,000	25.0			

## COOK COUNTY TRUCK TRAFFIC\*

Trucks (loaded) operating For Hire.....	17%	Consumption goods. ...	43.5%
Trucks engaged in direct distribution of goods to their final use.....	70%	Construction materials.	21.0%
		Haulage to farms.....	5.5%

## PENNSYLVANIA TRUCK TRAFFIC\*

Trucks (loaded) operating For Hire.....	13.6%	Foreign loaded trucks on routes near state boundary.....	37%
Truck haulage 29 miles or less....	80.6%	Foreign truck traffic, average on all routes. ....	5.2%

\*Figures from U. S. Bureau of Public Roads

# Highways---1925

## MILEAGE

Miles of highways in United States, Jan. 1, 1926.....	3,002,916
Miles of surfaced highways, federal, state and local, January 1, 1926, approximately	495,000
Miles of highways surfaced in 1925, approximately.....	35,000

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## FEDERAL AID

Miles in Federal Aid Approved System, January 1, 1926.....	179,770
Projects completed since passage Federal Aid Act, 1916 to December 31, 1925 miles	46,977
Projects under construction, December 31, 1925, miles.....	16,017
Projects approved for construction.....	1,794
Completed during 1925.....	10,348

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## EXPENDITURES

Total cost of Federal Aid projects completed to December 31, 1925.....	\$841,467,587.13
Federal Aid Share.....	\$371,701,144.42

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Total 1925 highway expenditures, estimated by U. S. Bureau of Public Roads,	\$1,002,000,000.00
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## 7% of Maine Roads Carry 53% of Traffic

(Data and map on this page were compiled by the U. S. Bureau of Public Roads in collaboration with Maine State Highway Department.)

Importance is attached to the figures, as illustrating that the highway construction problem is simpler than might appear from contemplating the total of road mileage in the country. That is, the bulk of the mileage having light travel needs only light surfacing. A small percentage of the roads with heavy surfacing will handle the bulk of the traffic.

Figures, being for one State, and for the specific period of July 1-Oct. 31, 1924, are not universal, but probably present a generally true picture. They illustrate a method of approach for meeting highway problems.

Red lines on the map indicate the volume of traffic. On the territory highways the average number of vehicles per day is 29.)



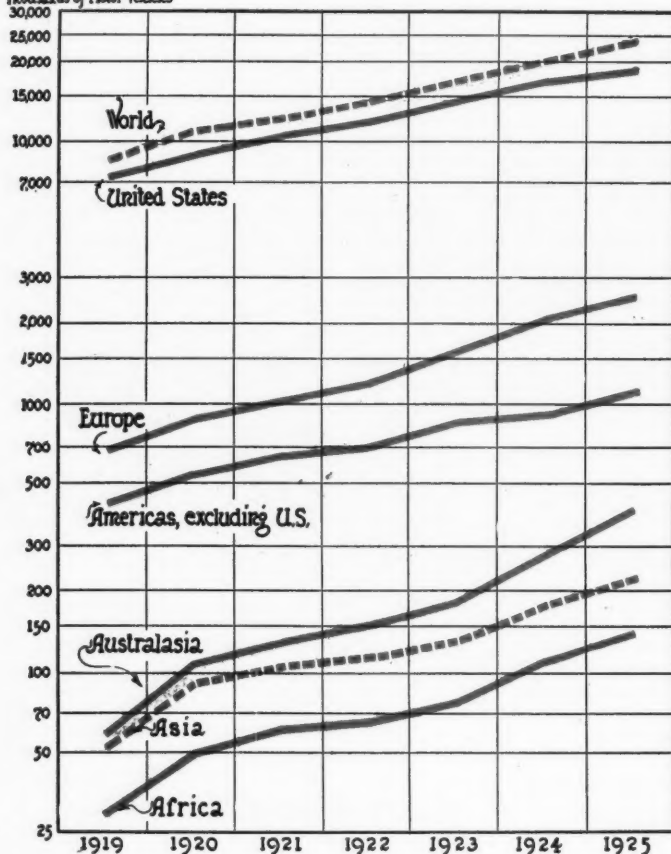
### HOW MAINE HIGHWAYS ARE USED

(Figures of Survey, July 1-Oct. 31, 1924)

	All Highways	Primary System	Secondary System	Third class System
Highway mileage.....	23,104	1,630	4,049	17,425
Percentage of highway mileage..	100.0	7.1	17.5	75.4
Daily vehicle-miles:				
All vehicle.....	3,187,000	1,702,000	986,000	499,000
Passenger cars.....	2,904,000	1,548,000	893,000	463,000
Trucks.....	283,000	154,000	93,000	36,000
Average density of traffic:				
All vehicles.....	138	1,044	244	29
Passenger cars.....	126	950	221	27
Trucks.....	12	94	23	2
Total vehicle-miles:				
All vehicles.....	392,001,000	209,346,000	121,278,000	61,377,000
Passenger cars.....	357,192,000	190,404,000	109,839,000	56,949,000
Trucks.....	34,809,000	18,942,000	11,439,000	4,428,000
Percentage of vehicle miles:				
All vehicles.....	100.0	53.4	30.9	15.7
Passenger cars.....	100.0	53.3	30.8	15.9
Trucks.....	100.0	54.4	32.9	12.7
Average daily gross tons per mile:				
All vehicles.....	201	1,521	356	42
Passenger cars.....	176	1,330	309	38
Trucks.....	25	191	47	4

## Registration Gains by Continents

Thousands of Motor Vehicles



CONTINENT	1919	1920	1921	1922	1923	1924	1925
Africa.....	29,150	49,928	62,592	65,757	79,810	110,559	147,689
Americas, (ex- cluding U. S.).	449,928	543,146	667,191	720,516	868,476	948,426	1,140,633
Asia.....	53,047	92,259	113,064	118,652	138,759	182,531	229,428
Australasia.....	58,500	110,060	131,000	135,069	180,272	288,759	416,586
Europe.....	696,323	915,590	1,083,790	1,228,480	1,664,090	2,161,189	2,675,891
United States...	7,565,440	9,231,941	10,463,295	12,238,375	15,092,177	17,593,677	19,954,347
<b>Total, World..</b>	<b>8,852,394</b>	<b>10,942,924</b>	<b>12,520,932</b>	<b>14,506,849</b>	<b>17,923,584</b>	<b>21,285,141</b>	<b>24,564,574</b>



## World Production—1925



(Figures from U. S. Department of Commerce)

Country	Passenger Cars and Trucks
United States.....	4,175,365
Canada.....	161,389
France.....	177,000
England.....	176,197
Germany.....	55,000
Italy.....	39,573
Belgium.....	5,400
Czechoslovakia.....	5,000
Austria.....	4,800
Spain.....	473
Switzerland.....	450
Hungary.....	329
Sweden.....	270
Denmark.....	75
<b>Total, World .....</b>	<b>4,800,321</b>

## Highway Income and Expenditures, 1924

### Less Than Half of Motor Fees Applied to Highways

INCOME



EXPENDITURE



Motor vehicle fees in 1924 amounted to 62% of the total income for highways, but only 23% of the income came from this source since these fees were diverted for other purposes. 1924 figures are the latest available for complete analysis in this way. Note that bond income is but 22.4% of the total, and bond payments and interest but 9.1%.

#### Highway Income 1924

Taxes and appropriations.	\$541,000,000
Motor vehicle fees and gas taxes.....	266,455,166
Bonds.....	259,000,000
Federal aid.....	91,400,000
Drawn from balance from.	\$1,157,763,987
Preceding year.....	23,757,128
<b>Total.....</b>	<b>\$1,181,521,115</b>

#### Highway Expenditures 1924

Construction.....	\$637,029,861
Maintenance.....	297,178,709
Machinery, equipment, etc.	138,370,000
Bond principal payments..	79,962,037
Interest payments.....	28,980,229
<b>Total.....</b>	<b>\$1,181,521,115</b>

### High Type Roads Save Operating Cost

(From Bulletin 69, Iowa State College)

Type of Surface	TYPE AND SPEED OF VEHICLE			
	Solid tire trucks 10 m.p.h. Cents per ton mile	Pneu. tire trucks 15 m.p.h. Cents per ton-mile	Automobiles 25 to 35 m.p.h. Cents per vehicle-mile	Motor buses 24 m.p.h. Cents per ton-mile
Average portland cement concrete and asphalt filled brick.....	8.00	8.30	10.00	24.00
Best portland cement concrete and asphalt filled brick.....	7.75	7.70	9.30	22.50
Best gravel, yearly average.....	8.50	8.80	10.90	25.70
Ordinary gravel, yearly average.....	9.00	9.40	11.80	27.80
Waterbound macadam, well maintained.....	8.70	8.95	11.10	26.00
Bituminous macadam, well maintained.....	8.50	8.80	10.60	25.70
Average sheet asphalt, yearly average temperature..	8.10	8.30	10.00	24.00
Average asphaltic concrete, yearly average temperature.....	8.00	8.30	10.00	24.00
Best earth, well packed by traffic, yearly average...	9.20	9.50	12.00	27.80
Ordinary earth with light traffic, yearly average...	9.50	9.95	12.60	29.60

## 1925 Motor Fees Approach Total Highway Bill

THE best estimates which the Bureau of Public Roads has been able to secure show that the annual bill over several years for rural highway improvements has been approximately one billion dollars.\* A considerable percentage of this annual expenditure has been derived from bonds issued to mature over a period of from 20 to 30 years, so that while these bonds must in time be paid, they do not represent an actual outgo of tax money collected during the year. Thus it is apparent that the income from the motor vehicle very largely covers the actual amounts of the funds collected during the year. The estimate of income from the motor vehicle for the current year is as follows:

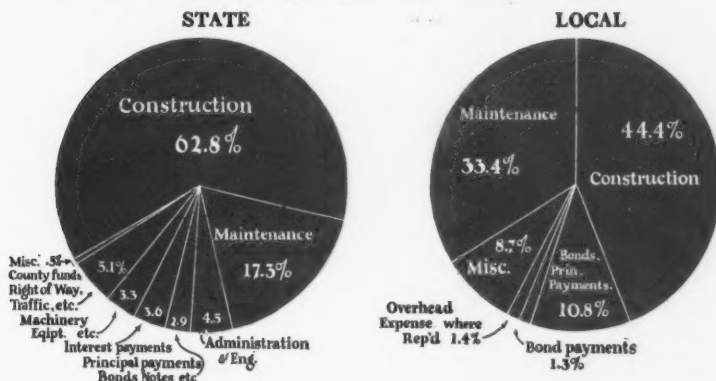
Federal excise taxes.....	\$131,872,000
Motor vehicle license fees.....	256,000,000
Gasoline taxes.....	164,463,000
Personal property taxes, 20 million cars (estimated).....	100,000,000
Municipal and local license	

fees (estimated).....	10,000,000
<b>Total.....</b>	<b>\$662,335,000</b>

The above estimate does not take into account the increased valuations of real property which have been due to motor vehicle transportation, to motor business property and other new properties and new values now tax-producing at their present rate largely through the motor vehicle. These facts indicate the real seriousness of the question of whether we are not reaching the limit of taxation of the motor vehicle. While it is true that the motor user can well afford to pay a large part of the tax bill, it is just as true that the utilization and extension of motor transport through improved roads is a creator of property values which in fairness should contribute to the support of the annual highway costs.—*Thomas H. MacDonald*, Chief, U. S. Bureau of Public Roads.

\*\$1,002,000 in 1925 (State \$338,000,000, Local \$464,000,000.)

## State and Local Highway Expenditures Compared



### Higher construction means lower maintenance cost

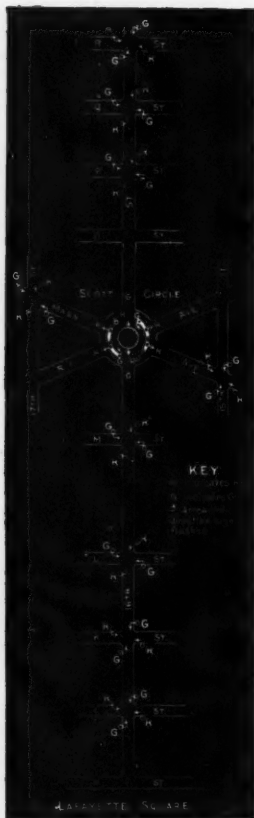
#### STATE HIGHWAY EXPENDITURES, 1924

Construction.....	\$381,080,058
Maintenance.....	104,806,557
County funds, right-of-way etc.....	30,657,927
Admin. and Engineering....	27,536,820
Interest payments.....	21,500,602
Prin. pay. Bonds, Notes, etc.	17,394,431
Machinery, equipment, etc..	18,792,166
Miscellaneous.....	2,895,590
<b>Total.....</b>	<b>\$605,665,207</b>

#### LOCAL HIGHWAY EXPENDITURES, 1924

Construction.....	\$255,949,803
Maintenance.....	192,372,152
Principal payments, Bonds..	62,567,876
Interest payments.....	7,479,580
Miscellaneous expenses.....	49,799,765
Overhead where reported ..	7,686,732
<b>Total.....</b>	<b>\$575,855,908</b>

# Co-ordinated Lights Move D. C. Traffic at 22 Miles per Hour



Continuous safe flow of traffic is being accomplished in Washington, D. C., by use of co-ordinated traffic lights as indicated in chart above. Green lights are on for two blocks at a time and the red changes to green as the traffic moves, permitting travel of 22 miles per hour continuously most of the day and 18 miles per hour in rush hours. During the 2 months preceding the installation of this system there were 51 accidents on 16th Street, which has this system. During the two months following there were thirty-five accidents, a decrease of 32 per cent.

## Motor Cars Carry 56% of Passengers in Nation's Capitol

### DAILY STREET TRAFFIC IN WASHINGTON, D. C.

Type of Vehicle	No. of Vehicles	No. of Passengers	% of Total Passengers	% of Passengers Per Vehicle
Private motor cars	227,004	441,988	56.8	1.9
Street Railways	15,273	304,547	39.2	19.9
Motor Buses	2,007	22,556	2.9	11.2
Taxicabs	11,078	8,708	1.1	.8
Total	255,362	777,799	100.0	3.0

### AVERAGE DAILY MOTOR AND HORSE TRAFFIC IN CHICAGO

Station location	Trucks	Passenger cars	Buses	Horse-drawn	Total
Michigan Avenue Bridge		54,269	1,930		56,199
Sheridan Road between Howard and Rogers Ave.		16,814			16,814
Michigan Blvd. at 35th St.		24,424	720		25,144
Grand Blvd. south of 33rd St.		29,404	619		30,023
Jackson Blvd. between 5000 and 5100 block		12,817	255		13,072
Washington Blvd. at 5133		18,344	512		18,856
Garfield Blvd. east of Robey St.		17,540	213		17,753
Milwaukee Ave. at 1792 N. Milwaukee Ave.	1,640	4,826		249	6,715
Western Ave., north of North Ave.	1,622	3,804		208	5,634
Grand Ave. at Homan Ave.	1,907	7,111		312	9,330
Roosevelt Rd. at 4600	1,375	3,618		166	5,159
Halsted Street between B. & O. Bridge and C. B. & Q. Bridge	1,555	3,794		541	5,890
Wabash Ave. at 1542 S. Wabash Ave.	4,500	9,774		903	15,177
Elston Avenue between Lawrence and Kostner Av.	985	5,301		140	6,426

## Cities Active in Traffic Progress

■ (Most of the leading cities in the United States are making counts of the volume of traffic using their streets, so as to have a scientific basis in building for the future. Three examples are given herewith.)

(Maps given are from the following sources: Chicago, U. S. Bureau of Public Roads; Detroit, Rapid Transit Commission; Boston, National Conference on City Planning.)



**DETROIT (above)**—Solid lines show existing rights of way. Improvement of eastern and northern routes is planned to balance city traffic and growth.

**BOSTON (right)**—This projected highway goes around the city of Boston freeing the city from the congestion of through traffic.



Cook County, Illinois embracing CHICAGO has organized a metropolitan survey program of allied municipalities to clear up the points of congestion.

# Standard Highway Markings for All States

*(The signs below and on the opposite page have been adopted by the Joint Board of Interstate Highways representing all States and will replace non-standard highway markings now in use.)*

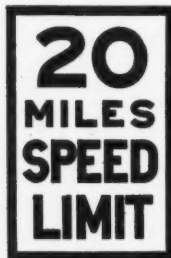


*Standard route marker adopted by the Joint Board on Interstate Highways for use on all United States highway routes. The color scheme will be black and white.*

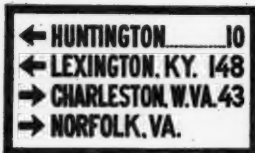
*Right—To be placed beneath standard route marker on approach to fork in road to indicate branch route follows.*



*Sign to indicate name of rivers, creeks and towns.*



*Speed limit sign.*

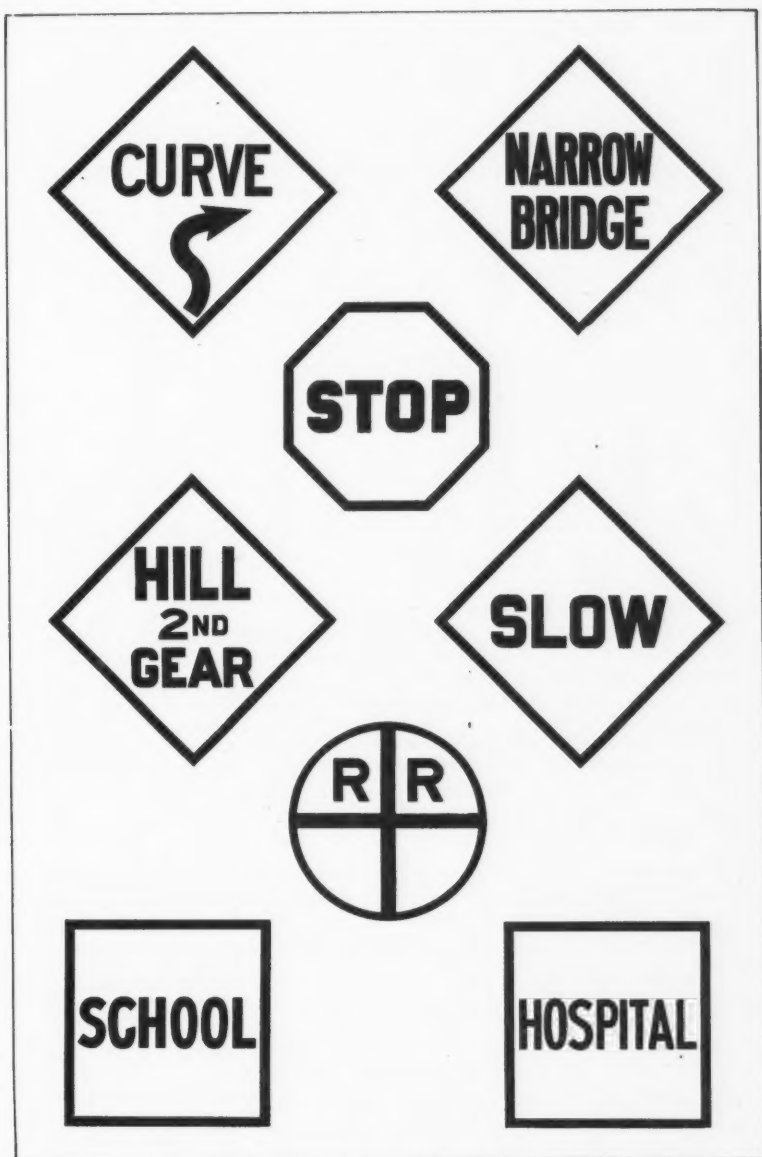


*For use at cross roads to indicate distance to points not on the route.*



*For use at any point to indicate distance to points on the route.*

**The standard route marker shown in upper left hand corner, and the five informational signs will have a black background with white letters.**

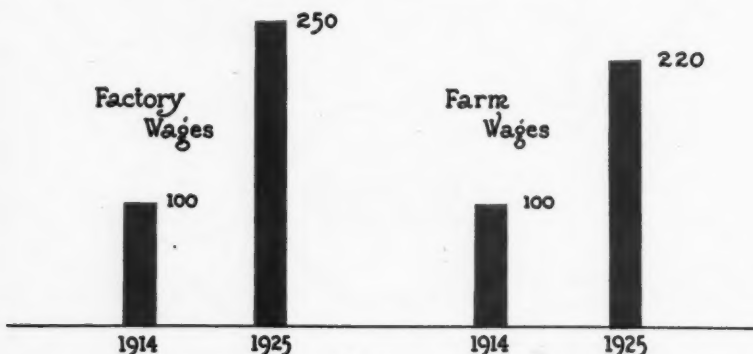


Caution signs to be used on United States highways. These signs will have a yellow background with black lettering and border.



## 150% Increase in Automobile Purchasing Power of Workmen's Wages

### PURCHASING POWER OF WAGES IN BUYING AUTOMOBILES



If the cost of living were the same today as in 1914, it would now be  $2\frac{1}{2}$  times as easy to buy an automobile with the average workman's income as it was in 1914. The exchange value, or in other words the purchasing power of wages for automobiles has increased 150% since 1914. This partly accounts for the big demand for motor cars.

This increased purchasing power of wages in buying automobiles is due to lower automobile prices as well as to higher wage rates since 1914. Factory wages have advanced from an index figure of 100 in 1914 to 215 in 1925. At the same time automobile prices have declined from an index of 100 before the war to 86.2 in 1925.

The computation is based on data from the following sources: factory wages, National Industrial Conference Board, Inc., farm wages, U. S. Department of Agriculture; automobile prices are the averages obtained by dividing aggregate value by number produced in 1914 and 1925 respectively.




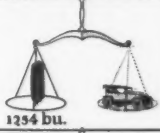







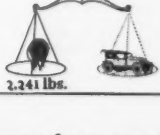
### Roadside Markets Profitable

100 roadside markets in Maryland sold \$267,000 worth of produce to motorists last year. 131 similar stands in New Jersey sold \$305,000 worth of produce direct to motorists.—EDWARD L. BROWNE, *Research Specialist, University of Maryland*

—“*American Motorist*.”

# What the Farmer Pays for His Automobile Today

*Compared with 1913*

Farmer paid in <b>1913</b>		Farmer pays <b>TODAY</b>
 1482 bu.	<b>Wheat</b>	 352 bu.
 2521 bu.	<b>Corn</b>	 1254 bu.
 19.3 bales	<b>Cotton</b>	 10.1 bales
 12074 lbs.	<b>Hogs</b>	 7950 lbs.
 21,406 lbs.	<b>Cattle</b>	 13,850 lbs.
 6,214 lbs.	<b>Wool</b>	 2,241 lbs.

In terms of staple farm products it costs the farmer from one-third to two-thirds less to pay for his automobile today than it did in 1913. In other words the exchange value of wheat, hogs, wool, cotton, corn and cattle for automobiles is from  $1\frac{1}{2}$  to  $2\frac{3}{4}$  times greater today than in 1913.

Sources: Farm products, U. S. Department of Agriculture, average prices on farm Jan. 15, 1913 and 1926. Average automobile prices obtained by dividing number produced into total value.

# Automobile Dollar

*is nearly Double the value  
of the Cost-of-living Dollar*



**Automobile Dollar today worth \$1.16**

**1914**



**\$1.00**

**Automobile  
Dollar**

**1925**



**\$1.16**



**\$1.00**

**Cost-of-living  
Dollar**

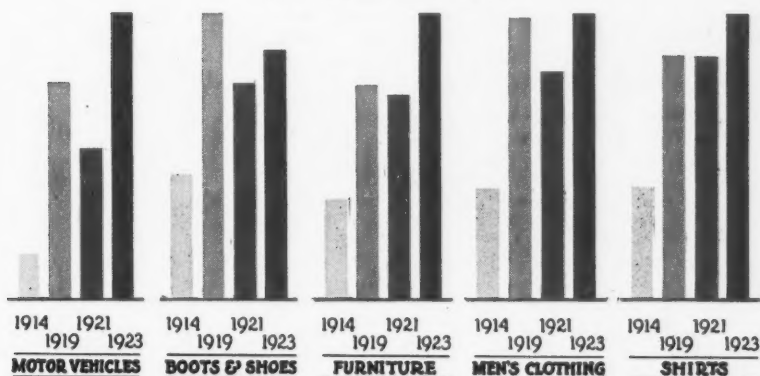


**59¢**

Sources: Cost of Living figures from National Industrial Conference Board, Inc. Computation of purchasing power of automobile dollar based on total annual production and total annual value of output.

## Personal Goods Industries Growing

( U. S. Census Bureau Figures )



That the increase in automobile use has been in line with purchases of other goods used by the individual is indicated by the chart and table herewith. 1923 figures (the latest census data available) show that furniture and men's wear have increased in volume of sales at a rapid rate, as well as motor products. Footwear has gained but not as rapidly as the other items.

### MOTOR VEHICLES

Census Year	Number of Establishments	Wage Earners (Average Number)	Wages	Value of Products
1923.....	351	241,356	\$406,730,000	\$3,163,328,000
1921.....	385	143,658	221,974,000	1,671,387,000
1919.....	315	210,559	312,166,000	2,387,903,000
1914.....	300	79,307	66,934,000	503,230,000

### BOOTS AND SHOES, OTHER THAN RUBBER

1923.....	1,606	225,216	\$250,346,000	\$1,000,078,000
1921.....	1,505	183,502	204,954,000	867,476,000
1919.....	1,449	211,049	210,735,000	1,155,041,000
1914.....	1,355	191,555	105,695,000	501,760,000

### FURNITURE

1923.....	3,043	168,089	\$204,513,000	\$776,495,000
1921.....	3,033	124,311	144,110,000	550,164,000
1919.....	3,273	140,188	143,112,000	579,650,000
1914.....	3,324	130,138	73,282,000	270,939,000

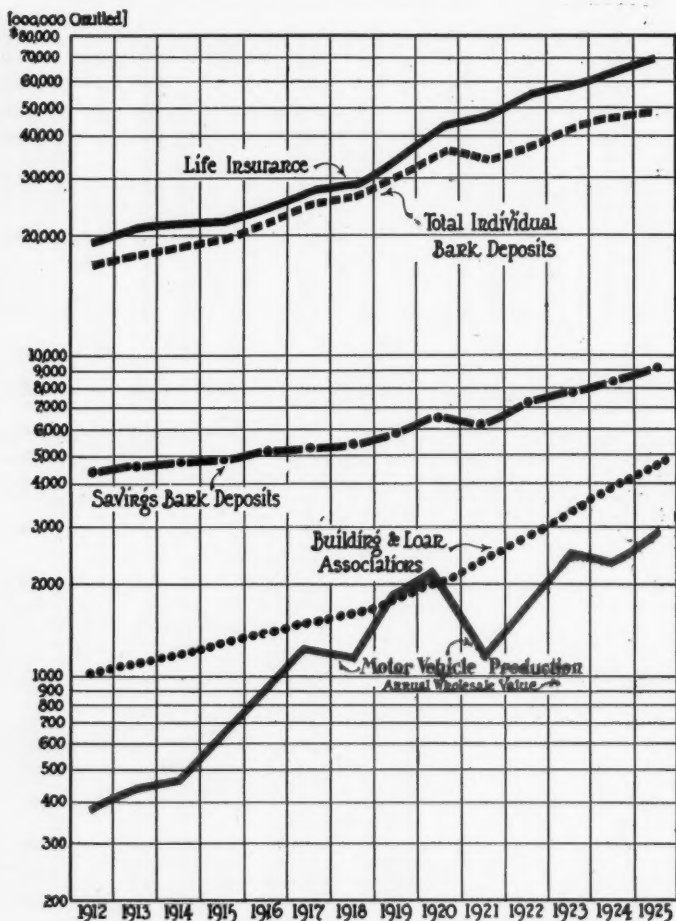
### MEN'S CLOTHING

1923.....	4,607	194,820	\$235,487,000	\$1,178,715,000
1921.....	4,539	165,206	201,882,000	934,776,000
1919.....	5,258	175,270	197,822,000	1,162,986,000
1914.....	4,830	173,747	86,828,000	458,211,000

### SHIRTS

1923.....	934	51,672	37,943,000	\$241,331,000
1921.....	860	45,427	33,182,000	203,944,000
1919.....	896	39,603	25,834,000	205,327,000
1914.....	792	51,972	19,170,000	95,815,000

## Investment in Savings and Motors Growing



Investment by the public in motor vehicles has been accompanied during the past ten years by a continual upward trend in various forms of savings. Assets of Building and Loan Associations have tripled, Life Insurance in force is more than two and a half times as great, Savings Bank deposits are nearly double, and Total Individual Bank Deposits are two and one-half times what they were in 1913.

## Home-Building and Automobiles Increasing

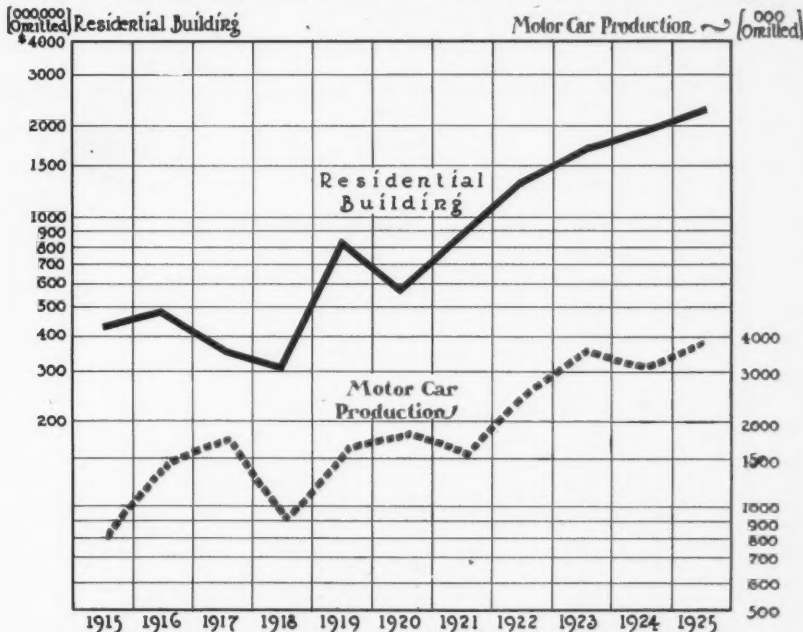


Chart indicates comparative gains in money expended for residential building since 1915, and the increase in motor car production during the same period. Building figures are for 27 northeast states on which figures are collected by the F. W. Dodge Co.

### INVESTMENT IN MOTOR VEHICLES, BANKS, LIFE INSURANCE, BUILDING AND LOAN ASSOCIATIONS 1913-1925

(See Chart on opposite page)

Year	Total Individual Deposits in all Banks	Savings Banks Deposits†	Building and Loan Association Assets	Life Insurance in Force, Ordinary and Industrial	Wholesale Value of Motor Vehicle Production
1913...	\$17,475,764,134	\$4,726,472,768	\$1,137,600,648	\$20,520,598,372	\$425,000,000
1914...	18,517,732,879	4,936,591,849	1,248,479,139	21,565,652,328	458,957,843
1915...	19,225,766,874	4,997,706,013	1,357,707,900	22,743,336,831	691,778,950
1916...	22,877,607,339	5,088,587,295	1,484,205,875	24,636,030,335	954,969,353
1917...	26,289,708,159	5,418,022,275	1,598,628,136	27,116,690,770	1,274,488,449
1918...	27,931,843,777	5,471,579,949	1,769,142,175	29,797,068,355	1,236,106,917
1919...	32,703,114,000	5,902,577,000	1,898,344,346	35,514,553,927	1,885,112,546
1920...	37,683,563,000	6,536,596,000	2,126,620,390	42,330,968,000	2,232,927,628
1921...	35,459,155,000	6,018,166,000	2,519,914,971	45,983,400,333	1,260,000,000
1922...	37,194,318,000	7,181,248,000	2,890,764,621	50,290,700,176	1,789,638,365
1923...	40,034,195,000	7,897,909,000	3,342,530,953	56,803,534,308	2,587,543,704
1924...	42,954,121,000	8,439,855,000	3,942,939,880	63,779,740,552	2,328,066,004
1925...	46,765,942,000	9,055,181,000	4,765,987,197	70,000,000,000	2,977,904,833

†Not including Postal Savings.

# 24,564,574 Motor Vehicles in the World

## 19% of Total Owned in Foreign Countries

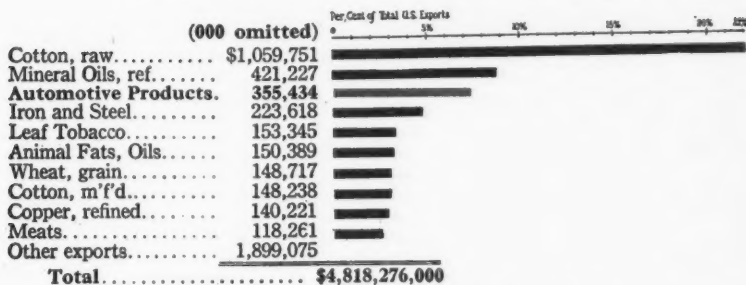
(Figures from Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce)

Country	Passenger Cars	Buses	Trucks	Population per Motor Vehicle	Country	Passenger Cars	Buses	Trucks	Population per Motor Vehicle
Abyssinia.....	25	.....	.....	40,000	Hawaii.....	22,000	25	5,000	.....
Aden.....	600	.....	110	77	Honduras.....	330	2	86	1,601
Afghanistan.....	50	.....	50	63,305	Hongkong.....	1,102	114	229	471
Alaska.....	763	12	363	.....	Hungary.....	5,815	42	1,320	1,137
Algeria.....	17,700	600	2,500	278	Iceland.....	154	.....	159	302
Angola.....	1,250	.....	625	2,196	India.....	58,364	1,700	9,064	159
Arabia.....	600	60	89	7,153	Iraq.....	2,250	1	100	.....
Argentina.....	165,000	1,050	12,000	54	Irish Free State.....	25,917	85	5,962	96
Australia.....	243,055	1,653	46,504	20	Italian Somaliland.....	35	.....	20	11,819
Austria.....	11,200	250	5,850	377	Italy.....	78,000	4,700	32,000	2,642
Azores.....	461	18	16	436	Jamaica.....	3,250	6	846	209
Bahamas.....	520	.....	200	74	Japan.....	21,245	1,600	9,853	1,789
Barbados.....	1,048	73	84	165	Latvia.....	750	140	300	1,605
Belgian Congo.....	625	.....	400	8,292	Liberia.....	32	.....	22	27,778
Belgium.....	50,270	1,000	41,443	82	Lithuania.....	454	21	70	3,690
Bolivia.....	1,000	10	500	1,868	Madagascar.....	650	.....	100	4,818
Brazil.....	50,000	150	13,500	481	Madeira Islands.....	350	40	45	411
Br. E. Africa.....	4,108	45	1,306	.....	Malta.....	731	75	63	259
Br. Guiana.....	897	46	65	295	Martinique.....	1,030	16	177	200
Br. Honduras.....	103	2	29	338	Mauritius.....	1,500	.....	125	231
Br. Malaya.....	16,500	2,000	2,200	49	Mexico.....	31,579	400	5,845	38
Br. N. Borneo.....	50	.....	12	4,158	Fr. Morocco.....	6,000	2,100	1,100	587
Br. Oceania.....	60	.....	15	.....	Netherlands.....	40,500	1,800	14,000	121
Br. Samoa.....	104	.....	83	198	Newfoundland.....	936	8	91	255
Br. W. Africa.....	2,372	.....	4,404	.....	New Zealand.....	81,698	1,386	13,264	13
Br. Somaliland.....	36	.....	56	3,261	Nicaragua.....	350	1	55	1,572
Br. S. W. Africa.....	565	.....	75	.....	Norway.....	17,000	960	7,700	103
Bulgaria.....	1,000	.....	450	3,420	Nyassaland.....	358	.....	88	2,694
Canada.....	644,725	2,000	72,993	12	Palestine.....	1,453	177	42	452
Canary Islands.....	2,382	65	899	14	Panama & C. Z.....	3,783	180	212	106
Ceylon.....	6,620	1,750	1,140	474	Papua.....	81	.....	41	2,061
Chile.....	13,250	1,200	2,520	230	Paraguay.....	520	48	162	1,361
China.....	11,200	480	2,000	.....	Persia.....	2,500	4	510	3,318
Chosen.....	1,040	16	145	15,249	Peru.....	5,000	280	2,500	594
Colombia.....	4,212	90	1,220	1,198	Philippine Is.....	13,266	1,760	3,212	.....
Cook Islands.....	44	.....	25	.....	Poland.....	12,022	475	3,503	1,823
Costa Rica.....	500	50	50	831	Portugal.....	10,785	175	2,494	493
Cuba.....	29,000	1,150	7,500	89	Port. E. Africa.....	385	5	80	.....
Cyprus.....	555	1	105	470	Reunion.....	500	.....	50	315
Czechoslovakia.....	12,300	500	4,500	787	Roumania.....	9,500	500	3,000	1,338
Danzig.....	1,045	71	362	260	Russia.....	18,500	.....	.....	.....
Denmark.....	45,500	820	14,000	56	St. Lucia.....	50	3	.....	.....
Dominica.....	20	.....	3	.....	St. Pierre.....	.....	.....	20	196
Dom. Republic.....	2,600	15	400	298	Salvador.....	1,000	20	60	1,436
D. E. Indies.....	33,750	300	4,000	1,302	Seychelles Is.....	3	.....	.....	.....
Dutch Guiana.....	110	.....	10	1,113	Siam.....	3,100	100	500	13,410
D. W. Indies.....	509	2	81	.....	Society Is.....	280	6	50	35
Ecuador.....	845	20	300	1,288	Solomon Islands.....	.....	.....	.....	8,500
Egypt.....	13,775	1,000	1,350	861	Spain.....	65,000	5,000	6,000	286
Eritrea.....	50	.....	20	5,795	Sudan.....	110	.....	33	17,304
Esthonia.....	273	.....	420	1,603	Sweden.....	60,300	2,500	18,800	74
Faeroe Islands.....	1	.....	10	1,941	Switzerland.....	29,000	500	7,900	104
Fiji Islands.....	315	.....	79	413	Syria.....	3,200	.....	425	823
Finland.....	8,100	900	3,000	286	Taiwan.....	93	145	46	12,871
France.....	450,000	35,000	250,000	54	Tongo.....	64	.....	50	207
Fr. Guiana.....	60	.....	15	589	Trinidad & Tobago.....	2,430	480	150	120
Fr. Indo China.....	2,900	.....	600	5,419	Tunis.....	3,085	140	445	571
Fr. W. Africa.....	1,200	.....	700	6,465	Turkey.....	3,300	.....	1,100	.....
Fr. E. Africa.....	60	.....	90	18,973	Union of S. Af.....	64,450	450	4,450	1,529
Germany.....	215,150	500	107,350	193	United States.....	17,464,504	57,826	2,432,017	5.7
Gibraltar.....	380	51	60	36	United Kingdom.....	660,734	18,000	224,287	49
Gilbert & Ell. Is.....	.....	.....	2	.....	Uruguay.....	20,000	200	3,400	.....
Greece.....	5,000	1,700	2,300	605	Venezuela.....	5,500	37	1,000	459
Grenada.....	223	18	32	.....	Jugoslavia.....	4,500	110	2,000	1,818
Guadeloupe.....	611	18	21	842					
Guatemala.....	1,210	15	254	1,433					
Haiti.....	1,300	50	100	1,410					
Grand Total					World.....				
					20,964,798 159,399 3,440,377				



## Automotive Exports Rank Third

(Figures from Bureau of Foreign and Domestic Commerce)



## Motor Highways in Latin America

(Figures from U.S. Department of Commerce)

Length in kilometers—1 mile equals 1.6093 kilometers

Countries	Good	Passable all year	Passable in dry season	Under construction	Projected	Total
Mexico.....	835	7,660	2,588	346	7,649	11,083
Guatemala.....	.....	.....	*623	270	293	623
Honduras.....	.....	†130	†185	110	552	315
Salvador.....	145	395	28	35	.....	568
Nicaragua.....	213	.....	142	202	.....	355
Costa Rica.....	107	21	61	200	759	189
Panama.....	290	.....	.....	100	30	290
Cuba.....	33	343	2,096	236	730	2,472
Haiti.....	457	79	563	.....	132	1,099
Dominican Republic.....	306	459	461	.....	677	1,226
Colombia.....	524	559	306	9	2,484	1,389
Venezuela.....	1,184	704	2,176	240	80	4,064
Ecuador.....	.....	440	120	356	1,065	560
Peru.....	542	4,131	.....	.....	.....	4,673
Bolivia.....	421	402	2,751	80	162	3,574
Chile.....	476	3,812	565	298	400	4,853
Argentina.....	517	756	†	486	1,233	1,273
Uruguay.....	436	946	72	.....	14	1,454
Paraguay.....	4	.....	93	495	.....	97
Brazil.....	2,378	17,281	10,612	2,767	9,549	30,271
<b>Total.....</b>	<b>8,868</b>	<b>38,118</b>	<b>23,442</b>	<b>6,230</b>	<b>25,809</b>	<b>70,428</b>

\*—461 kilometers are good in the dry season.  
†—Good in the dry season.

†—No data available, but number is large.



At left is map of the Central Highway of Cuba which will be 663 miles in length. Work on the project is now in progress.

Drawing by courtesy of "El Automóvil Americano."

## Exports 1925

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Total exports of motor vehicles including assemblies abroad.....	536,741
Increase in automobile exports over 1924....	39%
Per cent exported.....	12%
Value of U. S. and Canadian exports combined	\$399,914,268
Value of U. S. automotive exports (including engines and tires).....	\$354,123,926
Value of Canadian automotive exports.....	\$45,790,342
Number of motor vehicles exported from U. S..	312,240
Cars.....	252,124
Trucks.....	60,116
Number of motor vehicles exported from Canada.....	74,151
Cars.....	58,005
Trucks.....	16,146
Rank among all U. S. exports.....	3rd
Assemblies abroad of American motor vehicles.	150,350
Leading U. S. motor car foreign market....	Australia
Leading U. S. motor truck foreign market...	Australia
Imports of motor vehicles.....	672

# Motor Vehicle Exports BY YEARS

## UNITED STATES AND CANADA—Combined

(Figures from Bureau of Foreign and Domestic Commerce)

Calendar Year	PASSENGER CARS		TRUCKS		PARTS
	Number	Value	Number	Value	Value
1919.....	86,742	\$85,280,787	18,937	\$37,098,693	\$77,467,263
1920.....	160,578	178,832,100	34,078	49,834,837	91,474,040
1921.....	40,705	37,126,389	8,901	11,054,673	40,186,910
1922.....	102,184	72,109,390	14,007	9,365,427	40,224,130
1923.....	184,516	120,017,303	37,291	19,821,717	62,405,284
1924.....	203,002	140,360,585	41,256	24,737,571	79,971,028
1925.....	310,129	218,664,549	76,262	44,345,549	93,316,641

## Exports of Cars, Trucks and Parts FROM THE UNITED STATES

(Figures from Bureau of Foreign and Domestic Commerce)

Calendar Year	PASSENGER CARS		TRUCKS		PARTS
	Number	Value	Number	Value	Value
1919.....	67,145	\$73,700,527	15,585	\$35,425,437	\$42,562,186
1920.....	142,508	165,255,921	29,136	46,775,781	86,198,013
1921.....	30,950	32,533,725	7,480	10,335,893	39,058,729
1922.....	66,790	51,049,816	11,443	8,270,908	38,298,032
1923.....	127,035	90,692,272	24,861	15,318,058	58,974,907
1924.....	151,379	112,531,154	27,351	19,199,329	73,759,406
1925.....	252,124	190,869,665	60,116	39,095,547	86,943,913

## Exports of Cars, Trucks and Parts FROM CANADA

(Figures from Bureau of Foreign and Domestic Commerce)

Calendar Year	PASSENGER CARS		TRUCKS		PARTS
	Number	Value	Number	Value	Value
1919.....	19,597	\$11,580,260	3,352	\$1,673,256	\$3,490,577
1920.....	18,070	13,576,179	4,942	3,059,056	5,276,027
1921.....	9,755	4,592,664	1,421	718,780	1,128,181
1922.....	35,394	21,059,574	2,564	1,094,519	1,026,098
1923.....	57,481	29,325,031	12,439	4,503,659	3,530,377
1924.....	43,883	22,080,232	12,772	4,429,161	4,992,059
1925.....	58,005	27,794,884	16,146	5,250,002	6,372,728

## Motor Vehicle Imports 1918-1925

Year Ended December 31	Passenger Cars and Motor Trucks		Year Ended December 31	Passenger Cars and Motor Trucks	
	No.	Value		No.	Value
1918.....	73	\$39,733	1922.....	483	\$802,285
1919.....	117	123,025	1923.....	853	884,125
1920.....	926	1,026,518	1924.....	604	841,524
1921.....	522	876,163	1925.....	672	1,064,975

# Motor Vehicle Exported from U. S. Ports, 1925

(Figures for Calendar Year, from Bureau of Foreign and Domestic Commerce,  
U. S. Department of Commerce)

## PASSENGER CARS

Countries	Valued up to \$500 inclusive Number	Valued over \$500 to \$800 Number	Valued over \$800 to \$1200 Number	Valued over \$1200 to \$2000 Number	Valued over \$2000 Number	Total Number	Total Value
Austria.....	17	23	19	12	71	\$100,292	
Azores & Mad.....	101	26	17	13	158	97,684	
Belgium.....	2,270	797	1,399	594	5,193	4,318,336	
Bulgaria.....	5	7	2	.....	14	12,554	
Czechoslovakia.....	2	19	73	37	131	151,116	
Denmark.....	6,565	639	691	136	8,046	4,143,193	
Estonia.....	.....	3	3	.....	6	7,882	
Finland.....	85	268	318	86	772	732,529	
France.....	3	61	629	239	1,104	1,377,553	
Germany.....	58	934	1,330	913	3,623	4,599,283	
Gibraltar.....	2	1	1	.....	4	2,829	
Greece.....	168	257	199	73	725	661,254	
Hungary.....	5	22	26	17	73	80,040	
Iceland and Faroe Is.....	.....	3	7	.....	10	12,571	
Irish Free State.....	10	139	63	6	218	183,261	
Italy.....	7,974	100	21	18	8,141	2,590,989	
Latvia.....	7	7	28	15	59	65,168	
Lithuania.....	.....	2	1	.....	3	2,250	
Malta, Gozo & Cyprus Islands.....	114	17	16	2	149	70,546	
Netherlands.....	54	505	1,036	641	194	2,430	
Norway.....	169	151	222	68	7	617	
Poland and Danzig.....	5	51	94	54	10	214	
Portugal.....	351	144	330	116	23	964	
Rumania.....	29	92	213	62	18	414	
Russia in Europe.....	146	42	10	10	248	231,673	
Spain.....	1,526	1,518	2,066	1,052	222	6,384	
Sweden.....	241	1,126	1,580	353	78	3,378	
Switzerland.....	17	223	590	285	166	1,281	
Turkey in Europe.....	20	2	40	59	3	124	
United Kingdom.....	2,141	8,600	3,177	3,160	492	17,570	
Yugoslavia and Albania	16	22	52	21	12	123	
Canada.....	2,240	4,493	4,569	1,965	661	13,928	
Br. Honduras.....	12	5	.....	1	.....	18	
Costa Rica.....	18	59	129	6	3	215	
Guatemala.....	34	28	150	97	10	319	
Honduras.....	38	18	14	7	1	78	
Nicaragua.....	11	29	31	17	.....	88	
Panama.....	175	171	156	96	22	620	
Salvador.....	13	124	186	90	27	440	
Mexico.....	7,198	1,749	2,643	690	280	12,560	
Laborador and Newfoundland.....	62	55	44	12	.....	173	
Bermuda.....	.....	6	.....	.....	.....	6	
Barbados.....	22	16	24	8	.....	70	
Jamaica.....	237	224	132	27	3	623	
Miquelon and St. Pierre Is.....	.....	3	.....	.....	.....	3	
Trinidad and Tobago.....	131	50	32	15	1	229	
Other Br. W. Ind.....	183	40	34	15	3	275	
Cuba.....	5,543	980	841	363	308	8,035	
Dom. Republic.....	864	62	113	48	26	1,113	
Dutch W. Indies.....	20	51	48	11	1	131	
French W. Indies.....	25	.....	3	.....	.....	28	
Haiti.....	93	72	97	25	3	290	
Virgin Is. of U. S.....	20	5	1	2	.....	28	
Argentina.....	18,824	5,615	5,363	1,234	453	31,489	
Bolivia.....	1	59	51	23	18	152	
Brazil.....	8,047	1,774	3,252	632	269	13,974	
Chile.....	849	313	278	146	49	1,635	

(Continued on following page)

## Exports from U. S. Ports, 1925—Passenger Cars—(Continued)

Countries	Valued up to \$500 inclusive Number	Valued over \$500 to \$800 Number	Valued over \$800 to \$1200 Number	Valued over \$1200 to \$2000 Number	Valued over \$2000 Number	Total Number	Total Value
Colombia.....	508	309	293	265	38	1,413	\$1,242,419
Ecuador.....	45	30	29	24	3	131	110,831
Br. Guiana.....	9	9	18	1	2	39	35,348
Dutch Guiana.....	4	1	.....	1	.....	6	3,834
Paraguay.....	22	.....	1	.....	.....	23	8,957
Peru.....	540	156	355	98	46	1,195	977,189
Uruguay.....	3,322	449	593	211	64	4,639	2,430,491
Venezuela.....	1,049	267	763	203	64	2,346	1,880,640
Aden.....	26	2	1	.....	.....	29	14,977
Br. India.....	407	1,191	964	92	8	2,662	2,277,735
Ceylon.....	43	156	171	25	2	397	356,648
Straits Settlements.....	251	662	464	61	4	1,442	1,176,379
China.....	407	423	483	85	29	1,347	1,096,850
Chosen.....	7	5	2	2	.....	16	11,613
Java and Madag.....	46	833	482	107	3	1,499	1,399,919
Other Dutch E. Indies.....	12	161	90	31	6	300	278,026
Fr. Indo China.....	11	26	4	.....	.....	41	29,344
Hejaz, Arabia, etc.....	443	.....	7	.....	.....	450	157,175
Hongkong.....	77	26	21	22	4	150	136,597
Japan.....	182	252	447	127	87	1,095	1,120,918
Kwangtung.....	185	49	16	5	.....	255	130,568
(Leased territory)	.....	.....	.....	.....	.....	.....	.....
Palestine and Syria.....	883	282	212	84	6	1,467	875,309
Peria.....	174	8	.....	.....	.....	182	64,176
Philippine Is.....	1,713	561	633	191	75	3,173	2,258,069
Russia in Asia.....	5	.....	.....	.....	.....	5	2,663
Siam.....	18	29	6	.....	.....	53	37,208
Turkey in Asia.....	11	29	1	.....	.....	41	27,388
Australia.....	17,381	17,231	11,256	1,976	507	48,351	34,336,224
Br. Oceania.....	8	26	23	2	.....	59	47,960
Fr. Oceania.....	11	6	11	3	.....	31	23,476
New Zealand.....	2,458	1,243	3,203	735	61	7,700	6,765,531
Other Oceania.....	3	4	3	1	.....	11	8,744
Belgian Kongo.....	72	7	5	.....	1	84	36,841
Br. W. Africa.....	20	36	55	5	.....	117	163,348
Br. So. Africa.....	1,621	3,748	6,088	512	21	11,990	10,805,182
Br. E. Africa.....	287	109	365	30	2	793	668,176
Canary Is.....	24	53	77	31	5	190	193,876
Egypt.....	284	100	169	6	9	579	395,719
Algeria and Tunis.....	37	6	14	10	.....	67	46,074
Other Fr. Africa.....	227	33	12	2	.....	274	110,722
Liberia.....	3	4	2	4	.....	13	11,401
Morocco.....	518	23	19	9	1	570	239,140
Portuguese E. Africa.....	44	57	100	.....	.....	201	174,945
Other Portuguese Africa.....	47	57	12	.....	.....	116	76,559
Spanish Africa.....	41	12	3	2	.....	58	33,450
Other Asia.....	.....	.....	.....	.....	1	1	3,902
<b>Total Cars.....</b>	<b>100,230</b>	<b>60,448</b>	<b>59,842</b>	<b>18,565</b>	<b>5,215</b>	<b>244,300</b>	<b>\$184,900,534</b>

## Motor Trucks and Buses Exported from U. S. Ports

Countries	Up to 1 ton Valued up to \$800 Number	Up to 1 ton inc. valued over \$800 Number	Over 1 to 2½ tons inc. Number	Over 2½ tons Number	Total Number	Total Value
Azores, etc. Islands.....	31	4	2	.....	37	\$30,074
Belgium.....	2,258	4	6	1	2,269	889,006
Bulgaria.....	7	.....	2	.....	9	5,149
Czechoslovakia.....	.....	.....	1	.....	1	1,405
Denmark.....	3,140	35	61	10	3,246	1,382,927
Finland.....	14	15	44	.....	73	79,361
France.....	1	1	1	.....	3	2,948
Germany.....	310	59	179	1	549	418,561
Greece.....	21	9	37	1	68	77,485
Hungary.....	.....	.....	1	.....	1	2,453
Iceland & Faroe Is.....	.....	.....	.....	.....	1	1,110
Irish Free State.....	20	.....	8	.....	29	22,235
Italy.....	7,217	1	201	.....	7,419	1,870,517
Latvia.....	3	2	3	.....	8	6,187
Malta, etc. Is.....	1	.....	.....	.....	1	395
Netherlands.....	4	13	131	20	168	271,492
Norway.....	7	33	61	8	109	136,290

(Continued on following page)

# Exports from U. S. Ports, 1925—Trucks and Buses—(Continued)

Countries	Up to 1 ton Valued up to \$800 Number	Up to 1 ton Inc. valued over \$800 Number	Over 1 to 2½ tons Inc. Number	Over 2½ tons Number	Total Number	Total Value
Poland & Danzig.....	3	1	15	2	21	\$28,086
Portugal.....	39	3	1	.....	43	29,924
Rumania.....	12	.....	1	.....	13	8,120
Russia in Europe.....	456	1	1	22	480	300,988
Spain.....	1,202	14	156	2	1,374	644,032
Sweden.....	18	113	138	2	271	278,378
Switzerland.....	4	.....	1	.....	5	3,018
United Kingdom.....	3,475	163	661	23	4,322	2,519,063
Yugoslavia, etc.....	1	.....	.....	.....	1	475
Canada.....	226	184	1,231	161	1,802	2,568,817
Br. Honduras.....	6	.....	27	33	39	125,858
Costa Rica.....	25	2	21	1	49	45,735
Guatemala.....	37	2	108	1	148	180,264
Honduras.....	26	.....	6	3	35	33,423
Nicaragua.....	3	.....	5	4	12	29,880
Panama.....	123	17	42	.....	182	140,205
Salvador.....	11	1	26	35	73	164,033
Greenland.....	.....	.....	.....	16	16	69,302
Mexico.....	2,970	127	394	78	3,569	1,971,875
Miquelon, etc. Is.....	1	.....	.....	.....	1	550
Newfoundland & Lab.....	7	.....	5	.....	12	7,814
Bermuda.....	1	.....	.....	.....	1	555
Barbados.....	1	.....	6	2	9	16,282
Trinidad & Tobago.....	9	6	16	.....	31	29,371
Jamaica.....	164	2	39	3	208	121,493
Other Br. W. Indies.....	73	3	10	1	87	49,179
Cuba.....	1,652	130	223	143	2,148	1,271,216
Dom. Republic.....	122	5	21	36	184	191,578
Dutch W. Indies.....	45	1	4	.....	50	18,824
Fr. W. Indies.....	22	.....	.....	.....	22	8,129
Haiti.....	77	3	49	16	145	121,410
Virgin Is. of U. S.....	7	.....	.....	.....	7	2,692
Argentina.....	1,248	77	414	142	1,881	1,750,767
Bolivia.....	33	4	36	4	77	87,369
Brazil.....	4,515	36	111	30	4,692	1,909,700
Chile.....	971	132	349	137	1,589	1,378,360
Colombia.....	410	73	317	29	829	675,764
Ecuador.....	82	2	14	1	99	56,891
Br. Guiana.....	2	.....	6	.....	8	7,093
Fr. Guiana.....	2	.....	.....	.....	2	1,027
Paraguay.....	83	.....	.....	.....	83	29,032
Peru.....	726	71	612	49	1,458	1,244,692
Uruguay.....	1,260	16	36	30	1,362	500,306
Venezuela.....	564	45	212	24	845	699,544
Aden.....	4	.....	1	.....	5	3,970
Br. India.....	550	214	325	23	1,112	893,914
Ceylon.....	82	133	226	36	477	546,788
Strait Settlements.....	24	10	31	23	88	123,165
China.....	278	100	174	8	560	406,036
Java & Madura.....	21	2	60	4	87	90,244
Other Dutch E. Ind.....	6	4	48	.....	58	57,978
Fr. Indo China.....	30	.....	.....	.....	30	10,853
Hejaz, Arabia, etc.....	2	.....	1	.....	3	3,428
Hongkong.....	87	.....	7	2	96	59,096
Japan.....	37	2	17	11	67	93,427
Kwangtung.....	95	.....	10	.....	105	41,484
(Leased territory)	.....	.....	.....	.....	.....	.....
Palestine & Syria.....	34	6	10	.....	50	44,056
Persia.....	.....	1	.....	.....	11	28,696
Philippine Is.....	877	53	165	22	1,117	653,460
Siam.....	.....	.....	2	.....	2	2,090
Turkey in Asia.....	.....	.....	.....	3	3	10,800
Australia.....	5,158	628	1,391	372	7,549	5,953,541
Br. Oceania.....	10	.....	4	.....	14	10,802
Fr. Oceania.....	4	1	.....	1	6	6,013
New Zealand.....	442	165	683	95	1,385	1,497,692
Other Oceania.....	2	.....	1	.....	3	1,845
Belgian Congo.....	377	.....	.....	.....	378	131,591
Br. W. Africa.....	161	208	775	.....	1,144	1,177,494
Br. S. Africa.....	143	114	250	18	525	568,465
Br. E. Africa.....	377	9	44	2	432	272,339
Canary Islands.....	25	.....	7	1	33	22,232
Egypt.....	22	.....	10	2	34	37,958
Algeria & Tunis.....	7	.....	.....	.....	7	2,828
Other Fr. Africa.....	565	4	60	.....	629	283,166

(Continued on following page)

## Exports from U. S. Ports, 1925—Trucks and Buses—(Continued)

Countries	Up to 1 ton Valued up to \$800 Number	Up to 1 ton inc. valued over \$800 Number	Over 1 to 2½ tons inc. Number	Over 2½ tons Number	Total Number	Total Value
Italian Africa.....	.....	.....	8	.....	8	7,873
Liberia.....	9	.....	6	.....	15	6,809
Morocco.....	146	.....	10	1	157	72,995
Portuguese E. Africa...	43	.....	17	.....	60	26,648
Other Portuguese Africa	33	.....	22	.....	55	31,007
Spanish Africa.....	30	.....	.....	.....	30	13,756
<b>Total Trucks &amp; Buses</b>	<b>43,429</b>	<b>3,065</b>	<b>10,423</b>	<b>1,699</b>	<b>58,615</b>	<b>\$37,703,250</b>

## Shipments from United States to Non-Contiguous Territories, Calendar Year 1925

(Figures from Bureau of Foreign and Domestic Commerce)

	ALASKA		HAWAII		PORTO RICO	
	No.	Value	No.	Value	No.	Value
Motor trucks and buses..	100	84,119	600	668,441	801	639,737
Passenger cars.....	256	239,149	4,649	3,527,208	2,919	2,202,774
Auto unit assemblies....	.....	2,018	.....	2,479	.....	.....
Parts and accessories....	.....	78,841	.....	705,673	.....	411,516

## Leading Customers for United States and Canadian Exports

UNITED STATES Passenger Cars			CANADA Passenger Cars		
Country	Number	Value	Country	Number	Value
Australia.....	48,351	\$34,366,224	Australia.....	8,644	\$2,609,490
Argentina.....	31,489	20,489,082	New Zealand.....	8,392	4,282,669
United Kingdom..	17,570	16,218,988	British India.....	6,807	2,763,691
Brazil.....	13,974	9,204,431	Dutch East Indies	5,335	1,950,483
Canada.....	13,928	12,667,343	British S. Africa	5,168	2,076,369
Mexico.....	12,560	8,050,285	Straits Settlm'ts.	4,761	1,810,045
British S. Africa	11,990	10,805,182	Argentina.....	3,499	1,975,970
Italy.....	8,141	2,590,989	United Kingdom	3,060	2,981,408
Trucks and Buses			Trucks and Buses		
Australia.....	7,549	\$5,953,541	Australia.....	4,875	\$1,665,282
Italy.....	7,419	1,870,517	British India.....	2,032	705,336
Brazil.....	4,692	1,909,700	United Kingdom..	2,008	353,025
United Kingdom..	4,322	2,519,063	New Zealand....	1,749	615,422
Mexico.....	3,569	1,971,875	Dutch East Indies	1,226	416,754
Denmark.....	3,246	1,382,927	Straits Settlm'ts.	1,004	333,530
Belgium.....	2,269	889,005	British E. Africa..	760	275,176
Cuba.....	2,148	1,271,216	British S. Africa..	581	195,796
Parts and Accessories			Parts and Accessories		
Canada.....		\$28,583,425	Argentina.....		\$1,158,947
United Kingdom..		7,599,774	Brazil.....		829,148
Argentina.....		6,299,781	Australia.....		681,770
Brazil.....		5,333,639	New Zealand.....		533,681
France.....		4,796,939	United States.....		425,847
Denmark.....		4,338,083	Belgium.....		413,196
Australia.....		3,748,223	British S. Africa..		402,573
Belgium.....		2,889,388	British India.....		386,154
Japan.....		1,870,119	United Kingdom..		321,037
Mexico.....		1,637,349	Straits Settlements		251,456

# Federal Highway Status

179,770 Miles Authorized 47,176 Miles Completed

(Figures as of Dec. 31, 1925, from United States Department of Agriculture, Bureau of Public Roads)

States	Certified Total Mileage	Limiting 7 Per Cent Mileage	Mileage on 7 Per Cent System Ap- proved Jan. 1, 1926	Per Cent Limiting Mileage Jan. 1, 1926	Projects Completed Mileage	Projects under and approved for, Con- struction Mileage
Alabama.....	56,551	3,959	3,872.00	98	1010.1	459.2
Arizona.....	21,400	1,498	1,498.00	100	694.2	119.4
Arkansas.....	71,960	5,037	5,007.03	99	1178.9	476.2
California.....	70,000	4,900	4,562.60	93	942.2	381.3
Colorado.....	48,000	3,360	3,332.00	99	688.9	261.6
Connecticut.....	12,000	840	835.43	99	115.0	32.8
Delaware*.....	3,800	266	345.08	130	119.4	33.2
Florida.....	27,548	1,928	1,901.00	99	96.3	309.4
Georgia.....	80,892	5,663	5,558.40	98	1635.3	785.5
Idaho.....	40,200	2,814	2,768.60	98	624.7	223.0
Illinois.....	96,771	6,774	5,002.22	74	1,268.3	284.9
Indiana.....	70,946	4,966	4,679.00	94	463.3	509.5
Iowa.....	109,113	7,638	7,231.00	95	2,033.4	611.0
Kansas.....	124,143	8,690	7,873.00	91	1,037.5	657.3
Kentucky.....	53,000	3,710	3,639.95	98	653.3	318.9
Louisiana.....	40,000	2,800	2,800.00	100	992.6	146.8
Maine.....	23,104	1,617	1,393.46	86	291.2	74.6
Maryland*.....	14,810	1,037	1,421.69	137	310.1	125.3
Massachusetts.....	20,525	1,437	1,308.00	91	321.0	85.7
Michigan.....	75,000	5,250	4,817.00	92	864.4	312.7
Minnesota.....	109,050	7,214	6,849.60	95	3,118.2	537.0
Mississippi.....	53,000	3,710	3,629.00	90	933.4	495.8
Missouri.....	111,510	7,806	7,530.00	96	1,292.3	745.7
Montana.....	67,100	4,697	4,366.00	93	983.8	303.1
Nebraska.....	80,272	5,619	5,489.00	98	1,690.9	1,120.3
Nevada.....	22,000	1,540	1,398.00	91	452.9	398.0
New Hampshire.....	14,112	988	977.39	99	228.3	27.4
New Jersey.....	17,120	1,198	1,198.30	100	248.5	62.1
New Mexico.....	47,607	3,333	3,298.00	99	1,383.0	149.6
New York.....	81,873	5,731	5,018.00	88	1,000.3	777.0
North Carolina.....	60,000	4,200	3,790.30	90	1,186.9	237.5
North Dakota.....	106,202	7,434	6,162.00	83	2,074.8	647.0
Ohio.....	84,497	5,915	5,912.50	99	1,276.4	396.6
Oklahoma.....	112,698	7,889	5,545.00	70	939.4	338.2
Oregon.....	41,826	2,928	2,814.00	96	869.9	153.0
Pennsylvania.....	90,000	6,300	3,693.36	59	931.2	687.3
Rhode Island*.....	2,368	166	242.43	146	70.8	44.4
South Carolina.....	52,318	3,662	3,230.00	88	1,294.5	421.3
South Dakota.....	115,390	8,077	5,666.00	70	1,694.6	895.6
Tennessee.....	65,204	4,564	3,180.20	70	604.0	357.9
Texas.....	182,816	12,797	11,129.00	87	4,369.9	1,471.1
Utah.....	24,057	1,684	1,588.00	94	429.0	272.4
Vermont.....	14,900	1,043	1,043.00	100	111.3	46.3
Virginia.....	53,338	3,733	3,075.50	82	888.9	241.0
Washington.....	42,428	2,969	2,907.70	98	647.2	44.3
West Virginia.....	31,629	2,214	1,927.95	87	339.5	214.3
Wisconsin.....	78,800	5,516	5,493.36	99	1,497.4	296.1
Wyoming.....	46,320	3,242	3,071.70	95	1,079.2	214.4
Totals.....	2,862,198†	200,353	179,770.75	89†	47,176.6	17,805.0

\*Extensions to the 7% system have been approved in these States.

†Does not include all mileage in U. S. which equals 3,002,916.



# Total Motor Vehicle Registrations by States—1920-1925

(Figures as of December 31st from U. S. Bureau of Public Roads)

STATE	1920	1921	1922	1923	1924	1925
Alabama.....	74,637	82,366	90,052	126,642	157,262	194,580
Arizona.....	34,601	35,611	38,034	49,175	57,828	68,029
Arkansas.....	59,082	67,408	84,596	113,300	141,983	183,589
California.....	583,623	680,614	861,807	1,100,283	1,319,394	1,440,541
Colorado.....	129,255	145,739	162,328	188,956	213,247	240,097
Connecticut.....	119,134	134,141	152,977	181,748	217,236	250,669
Delaware.....	18,300	21,413	24,560	29,977	35,136	40,140
District of Columbia.....	34,161	40,625	52,792	74,811	88,762	103,092
Florida.....	73,914	97,957	116,170	151,990	195,128	286,388
Georgia.....	146,000	131,976	143,423	173,889	207,688	248,093
Idaho.....	50,861	51,294	53,874	62,379	69,227	81,506
Illinois.....	568,924	663,348	781,974	969,331	1,119,236	1,263,177
Indiana.....	333,067	400,342	469,939	583,342	651,705	725,410
Iowa.....	437,378	461,084	500,158	571,061	616,128	659,202
Kansas.....	294,159	289,539	327,194	375,594	410,891	457,033
Kentucky.....	112,683	126,802	154,021	198,377	229,804	261,647
Louisiana.....	73,000	77,885	102,284	136,622	178,000	207,000
Maine.....	62,907	77,527	92,539	108,609	127,598	140,499
Maryland <sup>2</sup> .....	102,841	136,249	165,624	169,351	198,465	234,247
Massachusetts.....	274,498	360,732	385,231	481,150	570,578	646,153
Michigan.....	412,717	476,452	578,210	730,658	867,545	989,010
Minnesota.....	324,166	323,475	380,557	448,187	503,437	569,694
Mississippi.....	68,486	65,039	77,571	104,286	134,680	177,262
Missouri.....	297,008	346,437	392,523	476,598	540,500	604,166
Montana.....	60,650	58,785	62,650	73,828	79,695	94,656
Nebraska.....	219,000	238,704	256,654	286,053	308,715	338,719
Nevada.....	10,464	10,821	12,116	15,699	18,118	21,169
New Hampshire.....	34,680	42,039	48,406 <sup>1</sup>	59,604	71,149	81,498
New Jersey.....	227,737	272,994	342,286	430,958	504,470	580,554
New Mexico.....	22,100	22,559	25,473	32,032	41,680	49,111
New York.....	676,205	812,031	1,002,293	1,204,213	1,412,879	1,625,583
North Carolina.....	140,860	148,627	182,550	246,812	302,232	340,287
North Dakota.....	90,840	92,644	99,052	109,266	117,346	144,972
Ohio.....	621,390	720,634	858,716	1,069,100	1,241,600	1,346,400
Oklahoma.....	212,880	221,300	249,659	307,000	369,903	424,345
Oregon.....	103,790	118,198	134,125	165,962	192,615	216,553
Pennsylvania.....	570,164	689,589	829,737	1,043,770	1,228,845	1,330,433
Rhode Island.....	50,477	54,608	66,083	76,312	95,482	101,756
South Carolina.....	93,843	89,836	95,239	127,467	161,753	168,496
South Dakota.....	120,395	119,274	125,241	131,700	142,396	168,028
Tennessee.....	101,852	117,025	135,716	173,265	204,680	244,626
Texas.....	427,693	467,616	526,238	688,233	801,833	975,083
Utah.....	42,616	47,485	49,164	59,525	68,316	90,500
Vermont.....	31,625	37,265	43,881	52,776	61,179	69,576
Virginia.....	115,470	139,200	168,000	218,896	261,945	282,650
Washington.....	173,920	185,359	210,716	258,264	295,443	328,442
West Virginia.....	80,664	93,940	112,763	157,924	191,085	217,589
Wisconsin.....	293,298	341,841	382,542	457,271	525,221	594,386
Wyoming.....	23,926	26,866	30,637	39,831	43,639	47,711
<b>Totals.....</b>	<b>9,231,941</b>	<b>10,463,295</b>	<b>12,238,375</b>	<b>15,092,177</b>	<b>17,593,677</b>	<b>19,954,347</b>

<sup>2</sup>Maryland registrations prior to 1923 include non-resident registrations.

# Passenger Car Registrations by States—1920-1925

(Figures as of December 31st)

STATE	1920	1921	1922	1923	1924	1925
Alabama.....	61,941	73,256	80,183	112,797	138,574	171,387
Arizona.....	29,868	31,631	33,774*	42,610	50,233	59,798
Arkansas.....	52,412*	60,148*	76,696	102,000	125,368	159,511
California.....	548,723*	645,522	822,394	1,056,756	1,125,381	1,225,796
Colorado.....	121,506	136,336	151,499	175,669	197,361	221,513
Connecticut.....	95,123	110,029	127,055	152,608	183,451	213,486
Delaware.....	16,270*	19,113*	21,810*	24,709	29,075	32,550
District of Columbia...	29,131	35,448	46,069	67,624	78,846	89,790
Florida.....	63,466	83,111	96,942	128,460	160,936	237,435
Georgia.....	134,000	117,762	126,498	151,420	181,413	217,578
Idaho.....	46,541*	46,935	49,393	57,200	61,600	73,896
Illinois.....	504,250	583,441	682,250	847,005	978,428	1,101,943
Indiana.....	300,226	357,025	413,410	510,114	566,736	630,554
Iowa.....	407,578	430,118	468,736	534,796	575,210	613,412
Kansas.....	272,389*	267,891	303,725	349,038	370,951	409,968
Kentucky.....	99,437	111,777	136,627	177,834	206,529	235,020
Louisiana.....	66,000	67,311	87,003	116,003	150,900	176,000
Maine.....	55,395	67,591	78,697	92,995	108,177	116,229
Maryland.....	87,625	124,652	153,748	157,742	187,215	222,173
Massachusetts.....	223,112	305,471	325,307	407,645	486,952	554,813
Michigan.....	366,946	426,687	518,127	658,658	784,070	885,524
Minnesota.....	300,166*	299,100	341,322	399,404	465,614	524,879
Mississippi.....	63,721	60,489*	71,000	93,846	122,117	159,134
Missouri.....	267,300*	311,787*	352,929	430,340	489,356	543,426
Montana.....	59,450	56,434*	55,682	65,449	69,824	82,135
Nebraska.....	200,000	219,781	233,658	259,382	277,449	301,716
Nevada.....	9,639*	10,000	10,759*	13,699	16,236	18,069
New Hampshire.....	30,240	36,994	42,270	52,608	63,662	72,472
New Jersey.....	204,125	248,477	267,777	341,853	404,929	469,156
New Mexico.....	20,664	21,155	23,820*	29,032	39,890	47,470
New York.....	527,332	663,478	816,435	1,000,367	1,176,867	1,346,665
North Carolina.....	127,405	134,884	163,600	225,488	274,752	311,384
North Dakota.....	88,475*	90,221	96,080	105,979	112,664	133,791
Ohio.....	538,090	622,044	740,884	927,200	1,076,800	1,179,400
Oklahoma.....	204,300	197,465*	221,697*	288,424	342,856	393,047
Oregon.....	91,336*	103,838	118,627	152,975	177,558	199,517
Pennsylvania.....	521,835	632,541	763,916	969,361	1,050,465	1,149,074
Rhode Island.....	40,914	44,915	53,307	62,382	78,235	84,337
South Carolina.....	86,711*	82,993	88,018	115,892	146,639	153,343
South Dakota.....	112,589	110,997	116,144	121,164	131,190	154,141
Tennessee.....	90,214	102,795	119,319	154,181	183,891	221,712
Texas.....	379,364*	417,231*	467,299*	628,233*	738,958	886,362
Utah.....	37,060	40,562	41,942	51,625	59,453	79,170
Vermont.....	28,709	33,778	41,241	49,420	57,072	64,566
Virginia.....	101,800	122,000	145,000	187,977	220,302	246,950
Washington.....	144,131	157,620	178,775	221,164	253,888	281,452
West Virginia.....	69,862	77,397	107,653	150,468	168,563	190,257
Wisconsin.....	277,093	320,577	356,143	422,718	475,182	528,090
Wyoming.....	21,387	23,966*	27,410	35,294	38,831	42,547
Totals.....	8,225,859	9,346,195	10,864,128	13,479,608	15,460,649	17,512,638

\*Estimated.

# Motor Truck

## Registrations by States—1920-1925

(Figures as of December 31st)

STATES	1920	1921	1922	1923	1924	1925
Alabama.....	12,696	9,110	9,869	13,845	18,688	23,193
Arizona.....	4,733	3,980	4,260*	6,565	7,596	8,231
Arkansas.....	6,670*	7,260*	7,900	11,300	16,615	24,078
California.....	34,900*	35,092	39,413	43,527	194,013†	214,745
Colorado.....	7,749	9,403	10,829	13,287	15,886	18,584
Connecticut.....	24,011	24,112	25,922	29,140	33,785	37,183
Delaware.....	2,030*	2,300*	2,750*	5,268	6,061	7,590
District of Columbia...	5,030	5,177	6,723	7,187	9,916	13,302
Florida.....	10,448	14,846	19,228	23,530	34,192	48,963
Georgia.....	12,000	14,214*	16,925	22,469	26,275	30,515
Idaho.....	4,320*	4,359	4,481	5,179	7,627	7,610
Illinois.....	64,674	79,907	99,724	122,326	140,808	161,234
Indiana.....	32,841	43,317	56,529	73,228	84,969	94,856
Iowa.....	29,800	30,966	31,422	36,265	40,918	45,790
Kansas.....	21,770*	21,648	23,469	26,556	39,940	47,065
Kentucky.....	13,246	15,025	17,394	20,543	23,275	26,627
Louisiana.....	7,000	10,574	15,281	20,619	27,100	31,000
Maine.....	7,512	9,936	13,842	15,614	19,421	24,270
Maryland.....	15,216	11,597	11,876	11,609	11,250	12,074
Massachusetts.....	51,386	55,261	59,924	73,505	83,626	91,340
Michigan.....	45,771	49,765	60,083	72,000	83,475	103,486
Minnesota.....	24,000*	24,375	39,235	48,783	37,823	44,815
Mississippi.....	4,765	4,650*	6,571	10,440	12,563	18,128
Missouri.....	29,700*	34,650*	39,594	46,258	51,144	60,740
Montana.....	1,200	2,351*	6,968	8,379	9,871	12,521
Nebraska.....	19,000	18,923	22,996	26,671	31,266	37,003
Nevada.....	825*	821	1,357*	2,000	1,882	3,100
New Hampshire.....	4,440	5,045	6,136	6,996	7,487	9,026
New Jersey.....	23,612	24,517	74,509	89,105	99,541	111,398
New Mexico.....	1,436*	1,404	1,653*	3,000	1,790	1,641
New York.....	148,873	148,553	185,858	203,846	236,012	278,918
North Carolina.....	13,455	13,743	18,950	21,324	27,480	28,903
North Dakota.....	2,365*	2,423	2,972	3,287	4,682	11,181
Ohio.....	83,300	98,590	117,832	141,900	164,800	167,000
Oklahoma.....	8,580	23,834*	27,962*	18,576	27,047	31,298
Oregon.....	12,454*	14,360	15,498	12,987	15,057	17,036
Pennsylvania.....	48,329	57,048	65,821	74,409	178,380†	181,359
Rhode Island.....	9,563	9,693	12,776	13,930	17,247	17,419
South Carolina.....	7,132*	6,843	7,221	11,575	15,114	15,153
South Dakota.....	7,808	8,277	9,097	10,536	11,206	13,887
Tennessee.....	11,638	14,230	16,397	19,184	20,789	22,914
Texas.....	48,329*	50,385*	58,939*	60,000*	62,875	88,721
Utah.....	5,556	6,923	7,222	7,900	8,863	11,330
Vermont.....	2,916	3,487	2,640	3,356	4,107	5,010
Virginia.....	13,670	17,200	23,000	30,919	41,643	35,700
Washington.....	29,789	27,739	31,941	37,100†	41,555	46,990
West Virginia.....	10,802	16,543	5,110	7,456	22,351	27,332
Wisconsin.....	16,205	21,264	26,399	34,556	50,039	66,296
Wyoming.....	2,539	2,900	3,227	4,537	4,808	5,164
Totals.....	1,006,082	1,118,520	1,375,725	1,612,569	2,133,028†	2,441,709

\*Estimated. †Big increase due largely to reclassification of trucks which previously had been classed as passenger cars.

# \* State Motor Vehicle License

MOTOR VEHICLE FEES, LICENSES, PERMITS, FINES, ETC.; GROSS

(Figures from United States Department of

States and District of Columbia <sup>1</sup>	Registration Receipts <sup>1</sup>			Miscellaneous Receipts	
	Total Gross Receipts <sup>1</sup>	Total Motor Vehicles	Passenger Cars and Buses	Trucks and Road Tractors	Dealers' Licenses
Alabama.....	\$2,511,129	\$2,494,820	.....	.....	\$2,599
Arizona.....	405,592	385,032	.....	.....	3,649
Arkansas.....	3,150,000	10	.....	.....	.....
California.....	7,816,298	6,754,002	\$4,081,130	\$2,672,872	42,251
Colorado*	1,430,299	1,336,392	1,127,149	209,243	.....
Connecticut...	5,644,247	4,303,483	3,178,878	1,124,605	.....
Delaware*	680,700	517,004	378,265	138,739	7,990
Florida.....	3,645,628	3,449,052	2,536,383	912,669	24,435
Georgia*	3,010,415	2,952,609	2,473,485	479,124	42,700
Idaho.....	1,192,582	1,155,174	967,860	187,314	19,515
Illinois.....	12,969,784	12,111,679	9,259,929	2,851,750	88,050
Indiana.....	4,649,663	4,318,734	3,300,396	1,018,338	53,950
Iowa.....	9,741,103	10	.....	.....	.....
Kansas.....	4,610,090	10	.....	.....	.....
Kentucky*	3,780,062	3,664,979	2,864,448	800,531	31,012
Louisiana.....	3,400,045	3,343,049	.....	.....	.....
Maine.....	2,182,135	1,671,096	1,330,814	340,282	324,870
Maryland.....	2,576,301	2,006,322	1,744,423	261,899	.....
Massachusetts*,	9,843,901	7,346,952	5,794,224	1,552,728	59,700
Michigan*	14,526,002	13,107,863	10,160,579	2,947,284	86,563
Minnesota*	9,744,834	9,651,795	8,654,290	997,505	34,092
Mississippi*	1,530,000	1,529,150	1,377,000	152,150	.....
Missouri.....	7,267,098	10	.....	.....	.....
Montana*	915,253	914,878	788,125	126,753	.....
Nebraska.....	3,936,458	3,791,628	3,141,477	650,151	.....
Nevada.....	209,197	208,401	.....	.....	.....
New Hampshire,	1,736,084	1,333,969	.....	.....	28,401
New Jersey*	10,515,323	7,582,255	4,527,893	3,054,362	63,661
New Mexico*	457,874	447,001	403,344	43,657	.....
New York*.....	25,506,245	22,502,688	15,675,072	6,827,616	153,745
North Carolina..	248,369,844	10	.....	.....	.....
North Dakota*	1,083,573	1,049,324	935,031	114,293	.....
Ohio.....	13,147,231	10	.....	.....	.....
Oklahoma.....	4,576,572	.....	.....	.....	.....
Oregon*	5,370,202	5,207,691	4,440,577	767,114	17,570
Pennsylvania*	21,926,972	16,934,504	11,568,692	5,366,812	296,887
Rhode Island*	1,863,955	1,432,561	1,059,054	373,507	13,340
South Carolina*.	2,366,076	2,106,271	1,784,735	321,536	25,670
South Dakota*..	2,445,112	2,403,501	2,143,944	259,557	23,975
Tennessee.....	3,060,948	10	.....	.....	.....
Texas.....	13,477,931	8,976,151	.....	.....	.....
Utah.....	554,235	10	.....	.....	.....
Vermont*	1,497,146	1,265,611	1,145,126	120,485	.....
Virginia*	4,300,950	3,947,402	3,414,997	532,405	.....
Washington*	4,980,026	4,848,572	3,774,828	1,073,744	.....
West Virginia*..	3,354,247	3,022,617	2,470,524	552,093	40,910
Wisconsin*.....	7,896,210	7,659,722	6,309,848	1,349,874	86,775
Wyoming.....	482,857	470,459	378,169	92,290	.....
Dist. of Col.*..	291,207	111,758	98,456	13,302	49,809
Detailed Total..	(\$184,412,512)	(161,574,729)	(123,289,145)	(38,285,584)	(1,537,661)
Grand Total....	\$260,619,621	.....	.....	.....	(6,994,219)

—Only financial data shown in this table.

1—All States report amounts of full calendar year, except North Carolina, which reports for only 6 months July 1 to December 31, on account of the registration year beginning on July 1st in that State.

2—The 34 States starred show complete receipt details, which are totaled under the 7 receipt columns as sub-totals called "Detailed Total," which together with \$634,076 in trailer receipts and \$436,428 motorcycle receipts in these States equals \$184,412,512.

4—Total funds received by state and county officials on connection with the operation of the motor vehicle license laws.

1—Receipts received for re-registrations, non-resident registrations, duplicate tags, etc., eliminated to correspond to numerical lists. 1—Includes all registered vehicles.

1—Includes \$62,370 for probate judges.

1—Amount from licenses of taxi chauffeurs allotted to State general fund. 1—For maintenance work.

1—No details given.

1—Traffic officer expenses, deducted from county share of net receipts.

1—Special State appropriation through State Highway Fund.

1—Special State appropriation.

1—For State Highway Commission maintenance. 1—Includes \$153,531 for motor vehicle law enforcement.

1—Expenses of State Highway Commission. 1—Estimated. 1—Expenses of motor vehicle theft dept.

\*Not including gasoline taxes totaling \$146,028,940.00.

# Receipts Total \$260,619,621

## RECEIPTS AND DISPOSITION OF FUNDS FOR CALENDAR YEAR 1925<sup>1</sup>

### Agriculture, Bureau of Public Roads)

Miscellaneous Receipts	Collection and Administration	Disposition of Gross Receipts For Highway Purposes				For Other Purposes	States and Dist. of Col.
		State Highways	Local Roads	State Road Bonds			
.....	\$105,527	\$769,874	\$486,490	\$1,138,828		\$10,410 <sup>2</sup>	..... Alabama
14,573	18,000	387,592					..... Arizona
512,220	12,000	1,731,000	583,000	824,000			..... Arkansas
89,043	951,076	3,432,611	3,073,607		1359,004		..... California
1,317,535	71,515	679,392	679,392				..... Colorado
18,232		5,644,247					..... Connecticut
139,392		680,700					..... Delaware
5,134	261,220	2,538,306	846,102				..... Florida
10,841	98,297	2,912,118					..... Georgia
344,539	"	140,444	1,037,226	14,917			..... Idaho
176,724	"	9,982,450		2,987,304			..... Illinois
.....	205,681	4,443,982					..... Indiana
.....	713,036	5,758,141		3,030,325	1239,601		..... Iowa
.....	230,505	3,284,689	1,094,896				..... Kansas
61,671	132,105	3,247,733	400,224				..... Kentucky
.....	40,000	3,360,045					..... Louisiana
142,665	1254,526	1,302,196		552,647	14,72,766		..... Maine
279,724	1250,000	2,326,301					..... Maryland
978,629	921,514	8,922,387					Massachusetts
955,125	300,000	7,356,467	6,000,000		1869,535		..... Michigan
40,357	"	6,294,834		3,450,000			..... Minnesota
.....	45,900		1,484,100				..... Mississippi
.....	432,023	6,835,075					..... Missouri
.....	32,000		883,253				..... Montana
136,472	98,411	1,151,414	2,686,633				..... Nebraska
.....	196	114,225	3,138	1,250			..... Nevada
84,633	114,610	1,613,804			17,680		N. Hampshire
824,104	1,177,057	5,552,266	3,725,000		261,000		..... New Jersey
9,575	31,991	283,922	141,961				..... New Mexico
2,728,458	3372,848	18,876,461	6,241,060		115,876		..... New York
.....	149,761	8,210,083					N. Carolina
32,852	150,000	401,787		130,000			..... North Dakota
.....	"	6,573,616	6,573,615				..... Ohio
.....	53,205	187,858	3,978,022		410,692		..... Oklahoma
2,903,185	200,000		1,292,551	3,877,651			..... Oregon
177,538	2,563,137	18,952,448			411,387		Pennsylvania
217,717	306,492	1,557,463					..... Rhode Island
16,006	187,729	1,736,716			441,631		..... S. Carolina
.....	21,511	1,222,556	1,201,045				South Dakota
4,490,640	54,243	3,006,705					..... Tennessee
.....	476,146	9,368,187	3,633,598				..... Texas
.....	82,037			554,235			..... Utah
226,535	"	1,415,109					..... Vermont
341,378	"	4,122,018			178,932		..... Virginia
83,325	240,059	4,665,195	74,772				..... Washington
144,621	264,386	783,573		2,000,000	306,288		..... W. Virginia
128,573	380,000	5,626,210	1,875,000		15,000		..... Wisconsin
11,344	"			482,857			..... Wyoming
128,328	36,820	254,387					Dist. of Col.
(\$13,235,345)							Detailed Total
.....	\$11,992,747	\$177,706,587	\$48,396,471	\$19,124,014	\$3,399,802		Grand Total

<sup>1</sup>—Estimated at \$302,600 paid from State appropriation.

<sup>2</sup>—Included under motor cars.

<sup>3</sup>—Refunds.

<sup>4</sup>—Toll bridge commission.

<sup>5</sup>—Collection fees of county clerks in addition to the expenses of 7 city offices, \$1,857,900 taken from General State Fund.

<sup>6</sup>—For period of 6 months, July 1 to December 31, as registration year begins July 1st.

<sup>7</sup>—Interest and sinking fund requirements included in State highway amount.

<sup>8</sup>—Special legislative appropriation of \$363,659.

<sup>9</sup>—Expense from State Highway Department fund

<sup>10</sup>—State General Fund to July 1, 1925: not to receive any share after this date.

<sup>11</sup>—\$1,420,048 expended for administration and balance for administration of road work by State Highway Department.

<sup>12</sup>—For State highway patrol.

<sup>13</sup>—Includes \$374,140 refund by amendment to law and \$67,491 to State General Fund.

<sup>14</sup>—Includes amount spent on collection and administration.

<sup>15</sup>—State appropriation of \$296,969.05.

<sup>16</sup>—Operation auto theft law.

<sup>17</sup>—State Road Comm'n's expenses.

<sup>18</sup>—Bond payments included with items.

<sup>19</sup>—All money collected deposited in U. S. Treasury. This amount is appropriation for expa. of administration.

<sup>20</sup>—Amount to balance with gross receipts. The U. S. appropriation for streets is much higher.

<sup>21</sup>—34 States show complete receipt details. See Note three (3) for further information.

# 19,954,347 Motor Vehicles

## 13% Gain Over Last Year

### 17,512,000 Motor Cars

#### MOTOR VEHICLE REGISTRATIONS, PERMITS,

(Figures as of December 31, from Bureau of

Registered Motor Vehicles, Individually  
and Commercially Owned

State and District of Columbia	Grand Total Registered Motor Cars and Trucks	Passenger Automobiles Taxis and Buses	Motor Trucks and Road Tractors	Special List of Passenger Cars for Hire <sup>a</sup>	
				Taxis, etc.	Buses
Alabama.....	194,580	171,387	23,193	2,710	778
Arizona.....	68,029	59,798	8,231	*568	569
Arkansas.....	183,589	159,511	24,078	*2,398	378
California.....	1,440,541	1,225,796	214,745	5,210	4,017
Colorado.....	240,097	221,513	18,584	2,416	816
Connecticut.....	250,669	213,486	37,183	*2,301	904
Delaware.....	40,140	32,550	7,590	192	138
Florida.....	286,388	237,435	48,953	*3,356	1,253
Georgia.....	248,093	217,578	30,515	1,969	715
Idaho.....	81,506	73,896	7,610	558	570
Illinois.....	1,263,177	1,101,943	*161,234	10,374	3,289
Indiana.....	725,410	630,554	94,856	3,648	1,896
Iowa.....	659,202	613,412	45,790	2,284	1,321
Kansas.....	457,033	409,968	*147,065	2,140	696
Kentucky.....	261,647	235,020	*26,627	2,981	1,120
Louisiana.....	207,000	176,000	31,000	1,477	672
Maine.....	140,499	116,229	24,270	*2,716	376
Maryland.....	234,247	222,173	12,074	*3,477	636
Massachusetts.....	646,153	554,813	91,340	6,254	1,857
Michigan.....	989,010	885,524	*103,486	3,325	2,161
Minnesota.....	569,694	524,879	44,815	1,833	932
Mississippi.....	177,262	159,134	18,128	1,555	2,049
Missouri.....	604,166	543,426	60,740	4,821	1,407
Montana.....	94,656	82,135	12,521	583	323
Nebraska.....	338,719	301,716	*37,003	1,256	323
Nevada.....	21,169	18,069	3,100	137	175
New Hampshire.....	81,498	72,472	9,026	1,903	635
New Jersey.....	580,554	469,156	111,398	5,367	2,401
New Mexico.....	49,111	47,470	1,641	391	309
New York.....	1,625,583	1,346,665	278,918	26,079	3,966
North Carolina.....	*340,287	311,384	28,903	2,102	2,446
North Dakota.....	144,972	133,791	*11,181	375	1,078
Ohio.....	1,346,400	1,179,400	167,000	5,354	4,103
Oklahoma.....	424,345	393,047	31,298	2,212	1,231
Oregon.....	216,553	199,517	17,036	732	698
Pennsylvania.....	1,330,433	1,149,074	181,359	6,937	2,615
Rhode Island.....	101,756	84,337	17,419	1,431	*262
South Carolina.....	168,496	153,343	15,153	1,646	473
South Dakota.....	168,028	154,141	*13,887	452	205
Tennessee.....	244,626	221,712	22,914	2,301	720
Texas.....	975,083	886,362	88,721	6,454	1,260
Utah.....	90,500	79,170	11,330	312	460
Vermont.....	69,576	64,566	5,010	1,134	153
Virginia.....	282,650	246,950	35,700	2,543	1,373

(See end of Table, pages 78, 79, for footnotes)

# Registered in U. S. in 1925

## Trucks Are 12½% of Total

## 2,441,000 Commercial Vehicles

LICENSES, ETC., CALENDAR YEAR 1925<sup>a</sup>

Public Roads, U. S. Department of Agriculture)

Other Registered Vehicles		Tax Exempt Official Vehicles and Motorcycles <sup>b</sup>		Number of Licenses, or Permits (Autos)			State and District of Columbia
Trailers	Motor-cycles	Local Cars	Motor-cycles (Official)	Dealers	Operators	Chauffeurs	
480	524	759	49	2,599	2,105	339	Alabama
918	263	572	30	330	339		Arizona
27,542	11,177	18,647	583	11,977	106,230		Arkansas
							California
82	1,862			3,206	20,079	7,776	Colorado
332	3,886	3,139	189	4,386			Connecticut
166	375			763	40,841	3,555	Delaware
1,062	1,200			2,016		5,656	Florida
	994			727		2,921	Georgia
168	518	1,050		324		448	Idaho
3,777	6,603	None		2,000		100,000	Illinois
5,068	4,525	525		2,242		40,247	Indiana
125	2,303	2,500	90				Iowa
	1,434	2,014					Kansas
	703	1,169		1,119		8,867	Kentucky
	520					10,000	Louisiana
790	1,293	882	88	1,070	162,435	6,150	Maine
586	4,619				109,747	38,185	Maryland
702	9,401	800	400	2,011	698,378	"	Massachusetts
10,592	3,387	3,353		1,958	197,547	75,621	Michigan
1,912	2,923		21	1,943			Minnesota
	100						Mississippi
1,087	1,984	1,317	5				Missouri
	252	1,000					Montana
807	1,207						Nebraska
20	120	293	13				Nevada
497	1,701	300		507	60,772	31,903	New Hampshire
1,389	7,730	4,469	771				New Jersey
88	209		3				New Mexico
5,051	18,642	10,588	1,192	4,703			New York
500	863	4,110					North Carolina
	443						North Dakota
9,000	12,650	4,200					Ohio
	817						Oklahoma
"	2,547			598	51,084	15,188	Oregon
2,821	15,234	9,750	888	24,105	1,570,219	"	Pennsylvania
59	1,343	458	64			"	Rhode Island
824	173	1,261	51		117,252		South Carolina
	345	763		959			South Dakota
	627		50	516			Tennessee
4,600	2,228	1,302	551				Texas
200	719	1,015					Utah
	718						Vermont
440	1,590	2,435	125				Virginia

(See end of Table, pages 78, 79, for footnotes)



## MOTOR VEHICLE REGISTRATIONS,

(Continued from

State and District of Columbia	Registered Motor Vehicles, Individually and Commercially Owned			Special List of Passenger Cars for Hire <sup>1</sup>		
	Grand Total Registered Motor Cars and Trucks	Passenger Automobiles Taxicabs and Buses	Motor Trucks and Road Tractors	Taxis, etc.	Buses	
Washington.....	328,442	281,452	46,990	1,633	1,574	
West Virginia.....	217,589	190,257	27,332	1,569	856	
Wisconsin.....	594,386	528,090	186,296	2,535	820	
Wyoming.....	47,711	42,547	5,164	347	553	
District of Columbia.....	103,092	89,790	13,302	1,182	265	
Totals.....	19,954,347	17,512,638	2,441,709	145,530	457,826	

<sup>1</sup>—This table lists only the number of motor vehicles, licenses and permits. For the financial statement see pages 74, 75.

<sup>2</sup>—All States but North Carolina report details for full calendar year. North Carolina reports only 6 months, July 1 to December 31st as fiscal year for registration ends on June 30th.

<sup>3</sup>—The first three columns record the regularly registered state motor cars and trucks, which pay the full registration fees. The grand total in first column is subdivided into the passenger carrying cars, which include passenger automobiles, taxis and cars for hire, and buses; and the commodity carrying or non-passenger motor vehicles, which include motor trucks and road tractors (excluding farm tractors).

<sup>4</sup>—These two special lists are taken from sources other than registration offices of the various states and are inserted to indicate the commercial activity of passenger cars. The taxis and cars for hire are taken from Internal Revenue Bureau report showing number of cars for hire with from 2 to 7 seats which paid Federal tax during fiscal year ending June 30th, 1925. A few States as noted reported later data which is here given. The buses shown are taken from "Bus Transportation" issued in February 1926, with exception of Rhode Island as noted. This list is only partial and may include some "jitneys" and cars with less than eight passengers. The total of buses for U. S. is reported by "Bus Transportation" as 69,425 but only the number here shown has been allocated to the various States.

### Growth in Mileage of Surfaced Highways

Year	Total Mileage	Miles Surfaced	Percentage Surfaced
1904.....	2,151,379	153,530	7.14
1909.....	2,199,645	190,476	8.66
1914.....	2,445,760	257,291	10.52
1921.....	2,941,294	387,760	13.17
1924.....	2,941,294	470,000	15.98
1925.....	3,002,916	*495,000	*16.5

\*Estimated by N. A. C. C.

### 70% of Homes Have Automobiles

#### Make Lot of Housewife More Attractive

(The following statement concerns a survey of 296,551 homes, made by the General Federation of Women's Clubs, reported by Mrs. John Dickinson Sherman, President, in the "Woman's Home Companion.")

The automobile outstrips the telephone by nearly 2 per cent. Seventy per cent of the families in 296,551 homes own automobiles. The fluctuation of percentages is interesting. In towns having a population of less than 10,000 the percentage is 60; in towns between 10,000 and 25,000 it is 70, while in cities above 25,000, 78 per cent of the families own automobiles.

Then why does the automobile take precedence over the stationary tub, the telephone over the vacuum cleaner and the

radio over the power-run sewing machine?

Because the housewife for generations has sought escape from the monotony rather than the drudgery of her lot. She can and does endure toil, actual physical labor, patiently and cheerfully; but she breaks physically and nervously under monotony. The automobile, the telephone and the talking machine or radio offer the modern homemaker the escape from that monotony which drove many of her predecessors insane.



## PERMITS, LICENSES, ETC.

two preceding pages)

Other Registered Vehicles	Tax Exempt Official Vehicles and Motorcycles <sup>1,17</sup>		Number of Licenses, or Permits (Autos)			State and District of Columbia
	Motor-cycles	Local Cars	Motor-cycles (Official)	Dealers <sup>2</sup>	Operators	Chauffeurs
Trailers						
1,595	2,879	.....	141	.....	.....	.....
345	1,432	.....	80	7,700	64,702	26,648
"	3,443	.....	.....	2,700	.....	.....
.....	220	203	.....	.....	.....	.....
No Fee	1,312	.....	.....	.....	17,503	3,126
83,625	140,348	79,529	5,343	.....	.....	Totals

<sup>1</sup>—Under this group are shown trailers generally used with road tractors and motorcycles (with or without side-car).

<sup>2</sup>—This group includes official cars which are exempt (or partially exempt) from paying regular registration fees to the States, and includes cars and trucks owned by the U. S. Government and the State, County and Municipal authorities. The total U. S. cars is taken from the records of the U. S. Budget Bureau and the other columns are as reported.

<sup>3</sup>—This column shows the number as reported by the States, and is not complete.

<sup>4</sup>—As reported by the Motor Vehicle Bureau.

<sup>5</sup>—Includes 7,728 public service corporation cars and trucks which are tax exempt by law.

<sup>6</sup>—Includes road tractors not formerly included.

<sup>7</sup>—Includes buses, as reported by State.

<sup>8</sup>—Total reported to this Bureau, which is larger than number shown in "Bus Transportation."

<sup>9</sup>—Included with operator's licenses.

<sup>10</sup>—Only 6 months data reported July 1 to December 31st as fiscal registration year ends June 30th.

<sup>11</sup>—Included with motor trucks and tractors.

## 98,496 Concerns in Vehicle-for-Hire Business

(Figures from U. S. Dept. of Agriculture, Bureau of Public Roads)

Alabama.....	1,384	Massachusetts...	3,581	Rhode Island....	956
Arizona.....	153	Michigan.....	3,267	South Carolina...	1,442
Arkansas.....	1,687	Minnesota.....	1,187	South Dakota....	387
California.....	2,566	Mississippi.....	1,362	Tennessee.....	1,512
Colorado.....	1,853	Missouri.....	3,531	Texas.....	4,590
Connecticut....	1,468	Montana.....	474	Utah.....	224
Delaware.....	199	Nebraska.....	830	Vermont.....	1,509
Florida.....	1,486	Nevada.....	104	Virginia.....	2,056
Georgia.....	1,316	New Hampshire...	1,581	Washington.....	874
Idaho.....	435	New Jersey.....	4,171	West Virginia...	1,193
Illinois.....	3,843	New Mexico.....	250	Wisconsin.....	1,586
Indiana.....	2,932	New York.....	17,956	Wyoming.....	351
Iowa.....	1,855	North Carolina...	1,916	Dist. of Columbia	304
Kansas.....	1,622	North Dakota....	262	Alaska.....	121
Kentucky.....	2,143	Ohio.....	3,390	Hawaii.....	1,900
Louisiana.....	1,027	Oklahoma.....	1,813		
Maine.....	2,187	Oregon.....	439		
Maryland.....	1,392	Pennsylvania....	3,829	Totals.....	98,496

"The wide extent of the operation by the railroad of coordinated rail and highway schedules is apparent by the fact that the New England Transportation Company now has in operation 777 miles of line, supplementing the New Haven's 1,958 miles of road. In addition, in its plan for supplying the public with the most modern and economical means for transportation, the road has twenty-five gasoline rail cars operating on 567 miles of rail line and covering a weekly distance of 16,505 miles."—*New York Times*, Feb. 7, 1926.

# STANDING OF STATES IN REGISTRATION-1925

New York Has Largest Number of Vehicles  
Also Leads in Numerical Increase

Florida First in Percentage Gain  
California has Most Cars to Population

TOTAL REGISTRATION		NUMERICAL INCREASE		PERSONS PER MOTOR CAR		PERCENTAGE INCREASE	
				State	Pop. per Motor Car†		Per Cent
1 N. Y....	1,625,583	1 N. Y....	212,704	1 Cal.....	3.20	1 Fla.....	46.8
2 Cal.....	1,440,541	2 Texas....	173,250	2 Iowa.....	4.08	2 Miss.....	33.6
3 Ohio.....	1,346,400	3 Ill.....	143,941	3 Ore.....	4.24	3 Utah.....	32.5
4 Penna....	1,330,433	4 Mich.....	121,465	4 Nev.....	4.30	4 Ark.....	29.3
5 Ill.....	1,263,177	5 Cal.....	121,147	5 S. D.....	4.32	5 Ariz.....	23.7
6 Mich.....	989,010	6 Ohio.....	104,800	6 Kans.....	4.42	6 N. D.....	23.6
7 Texas....	975,083	7 Penna....	101,588	7 Nebr.....	4.49	7 Texas....	21.6
8 Ind.....	725,410	8 Fla.....	91,260	8 Fla.....	4.59	8 Tenn.....	19.5
9 Iowa....	659,202	9 N. J.....	76,084	9 Colo.....	4.60	9 Ga.....	19.4
10 Mass....	646,153	10 Mass....	75,575	10 Mich.....	4.69	10 Mont.....	18.8
11 Mo.....	604,166	11 Ind.....	73,705	11 Ind.....	4.85	11 Md.....	18.2
12 Wis.....	594,386	12 Wis.....	69,165	12 Minn.....	4.88	12 S. D.....	18.0
13 N. J.....	580,554	13 Minn.....	66,257	13 N. D.....	5.13	13 N. M.....	17.8
14 Minn....	569,694	14 Mo.....	63,666	14 Wyo.....	5.21	14 Ida.....	17.7
15 Kans....	457,033	15 Okla....	54,442	15 Wash....	5.25	15 Ariz.....	17.6
16 Okla....	424,345	16 Kans....	46,142	16 Wis.....	5.31	16 Nev.....	16.8
17 N. C....	340,287	17 Iowa....	43,074	17 Ohio.....	5.36	17 La.....	16.3
18 Nebr....	338,719	18 Miss....	42,582	18 Vt.....	5.45	18 D. of C....	16.1
19 Wash....	328,442	19 Ark.....	41,606	19 D. of C....	5.54	19 Conn.....	15.4
20 Fla.....	286,388	20 Ga.....	40,405	20 Okla....	5.68	20 N. J.....	15.2
21 Va.....	282,650	21 Tenn....	39,946	21 Texas....	5.75	21 N. Y.....	15.0
22 Ky.....	261,647	22 N. C....	38,055	22 Utah....	6.21	22 Okla....	14.7
23 Conn....	250,669	23 Ala.....	37,318	23 N. H.....	6.23	23 N. H.....	14.5
24 Ga.....	248,093	24 Md.....	35,782	24 Ill.....	6.32	24 Del.....	14.2
25 Tenn....	244,626	25 Conn....	33,433	25 Mo.....	6.37	25 Mich.....	14.0
26 Colo....	240,097	26 Wash....	32,999	26 Ida.....	6.65	26 W. Va....	13.9
27 Md.....	234,247	27 Ky.....	31,843	27 Maine....	6.73	27 Ky.....	13.8
28 W. Va....	217,589	28 Nebr....	30,004	28 Ariz.....	6.81	28 Vt.....	13.7
29 Ore.....	216,553	29 La.....	29,000	29 Md.....	6.91	29 Mass.....	13.2
30 La.....	207,000	30 N. D....	27,626	30 Conn....	7.17	30 Minn.....	13.1
31 Ala.....	194,580	31 Colo....	26,850	31 Del.....	7.21	31 Wis.....	13.0
32 Ark.....	183,589	32 W. Va....	26,504	32 Mass....	7.43	32 Ill.....	12.8
33 Miss....	177,262	33 S. D....	25,632	33 N. J.....	7.46	33 Colo....	12.6
34 S. C....	168,496	34 Ore.....	23,938	34 R. I.....	7.57	34 N. C....	12.6
35 S. D....	168,028	35 Utah....	22,184	35 Mont....	7.87	35 Ore.....	12.4
36 N. D....	144,972	36 Va.....	20,705	36 N. M.....	8.00	36 Mo.....	11.8
37 Maine....	140,499	37 Mont....	14,961	37 Penna....	8.11	37 Ind.....	11.3
38 D. of C.	103,092	38 D. of C.	14,330	38 N. Y.....	8.25	38 Kans....	11.2
39 R. I....	101,756	39 Maine....	12,901	39 W. Va....	8.42	39 Wash....	11.1
40 Mont....	94,656	40 Ida.....	12,279	40 N. C....	8.85	40 Maine....	10.1
41 Utah....	90,500	41 N. H....	10,349	41 Va.....	9.92	41 Nebr.....	9.7
42 Idaho....	81,506	42 Ariz.....	10,201	42 Ky.....	10.58	42 Wyo....	9.3
43 N. H....	81,498	43 Vt.....	8,397	43 La.....	10.67	43 Cal.....	9.2
44 Vt.....	69,576	44 N. M....	7,431	44 Tenn....	10.90	44 Ohio....	8.4
45 Ariz.....	68,029	45 S. C....	6,743	45 Miss....	11.25	45 Penna....	8.3
46 N. M....	49,111	46 R. I....	6,274	46 S. C....	11.60	46 Va.....	7.9
47 Wyo....	47,711	47 Del.....	5,004	47 Ark.....	11.61	47 Iowa....	7.0
48 Del.....	40,140	48 Wyo....	4,072	48 Ga.....	14.00	48 R. I....	6.6
49 Nev.....	21,169	49 Nev.....	3,051	49 Ala.....	14.39	49 S. C....	4.2
Total U. S. 19,954,347		Total U. S. 2,360,670		Total U. S. 6.5		Total U. S. 13.4	

†Based on 1925 Census.

# City Registrations of Motor Vehicles

(Figures from Chambers of Commerce)

City	Motor Cars	Motor Trucks	Taxis or Jitneys	Buses	Total M. V.	Area Sq. Mi.	Population
Akron, Ohio	42,000	7,500	42	147	49,689	26	215,000
Albany, N. Y.	6,500	4,000			10,500	19	125,000
Atlantic City, N. J.	10,016	2,400	800 <sup>1</sup>		13,216	11	65,000
Augusta, Ga.	5,980 <sup>2</sup>				5,980	9	63,500
Baltimore, Md.	97,330	4,800	1,400	185 <sup>2</sup>	103,715	91	796,296
Birmingham, Ala.	33,527	4,500	237	15	38,279	52	237,693
Boston, Mass.	89,878	18,590	1,800		110,268	47	779,620
Bridgeport, Conn.	15,411	3,134	179	77	18,801	18	158,350
Buffalo, N. Y.	125,000 <sup>3</sup>		1,015	50	126,065	42	575,000
Cambridge, Mass.	12,615 <sup>1</sup>	2,600			15,215	6	120,000
Camden, N. J.	19,952	4,718		442 <sup>1</sup>	25,112	8	128,642
Canton, Ohio	20,000 <sup>4</sup>	2,800	33	42	22,875 <sup>4</sup>	12	106,000
Charleston, S. C.	7,800	600	110	12	8,522	5	73,125
Chicago, Ill.	289,948	48,262	5,400	416	344,026	201	2,925,000
Cincinnati, Ohio	79,000	14,000	300	250	93,550	72	415,000
Cleveland, Ohio	140,000	23,000	565	85	163,650	69	965,000
Covington, Ky.	10,100	900	42	11	11,053	7	65,000
Dallas, Texas	54,000 <sup>3</sup>				54,000	26	264,534
Denver, Colo.	67,598 <sup>1</sup>	4,714			72,312	63	311,076
Des Moines, Iowa	32,000	3,300	110	36	35,446	54	149,000
Detroit, Mich.	249,000	29,000			278,000	139	1,242,044
Duluth, Minn.	17,340	2,600	80	64	20,084		115,000
East St. Louis, Ill.	10,000	2,500	200	50	12,750		80,000
El Paso, Texas	14,406 <sup>2</sup>	2,208	321		16,935	13	104,928
Erie, Pa.	21,220	800	70	25	22,115	7 <sup>1</sup>	125,000
Evansville, Ind.	18,000	4,500	50	10	22,560	10	105,000
Fall River, Mass.	12,000	2,000	39	35	14,074	41	129,662
Flint, Mich.	34,916 <sup>3</sup>				34,916	29	142,000
Fort Wayne, Ind.	23,000	3,000	75	30	26,105	3	100,000
Fort Worth, Texas	38,107			2,996 <sup>1</sup>	41,103	39	175,000
Grand Rapids, Mich.	47,307	5,847	58		53,212	22	165,000
Harrisburg, Pa.	11,496	2,649	35	4	14,184	9	83,422
Hartford, Conn.	19,722	3,978	199	26	23,925	18	164,148
Houston, Texas	51,000 <sup>3</sup>		32	19	51,051	41	232,000
Hoboken, N. J.	2,700	1,000	183	23	3,906	1	68,166
Holyoke, Mass.	8,000	1,200	100	20	9,320	22	62,000
Indianapolis, Ind.	143,375	22,944			166,319	51	365,000
Jersey City, N. J.	15,000	3,000	200	300	18,500	19	325,000
Johnstown, Pa.	11,500	2,100	50	30	13,680	5	71,782
Kansas City, Kans.	26,000 <sup>2</sup>				26,000	22	130,000
Kansas City, Mo.	62,542 <sup>1</sup>	10,255			72,797	58	375,000
Knoxville, Tenn.	14,065	1,783		86 <sup>1</sup>	15,934	26	129,672
Lancaster, Pa.	10,224	1,987	15	3	12,229	4	56,686
Lincoln, Nebr.	12,000	4,000	55	46	16,101	12	92,623
Little Rock, Ark.	16,860	1,140	53	27	18,080	17	98,000
Long Beach, Cal.	32,692	10,537	130		43,259	30	140,000
Louisville, Ky.	37,365	6,849	566		44,780	40	305,935
Lowell, Mass.	10,000	2,000	100	3	12,103 <sup>4</sup>	14	124,035
Manchester, N. H.	6,546 <sup>3</sup>				6,546	38	83,097
Memphis, Tenn.	33,000	4,000	159 <sup>1</sup>		37,159	21	227,291
Milwaukee, Wis.	80,000	4,200	350	50	84,600	60	500,000
Minneapolis, Minn.	98,500	16,500	413	70	115,483 <sup>4</sup>	54	4425,435
Nashville, Tenn.	20,000	4,000	75	25	24,100	19	140,000
New Bedford, Mass.	17,751	3,968	50 <sup>1</sup>	20 <sup>1</sup>	21,789	19	130,000

<sup>1</sup>—Includes taxis, jitneys and buses.

<sup>2</sup>—Freight and passenger.

<sup>3</sup>—Includes trucks.

<sup>4</sup>—Estimated.

<sup>5</sup>—Includes trucks, taxis, jitneys and buses.

<sup>6</sup>—Includes taxis.

<sup>7</sup>—Includes buses.

©—County figures.

(Continued on following page)

## City Registrations of Motor Vehicles

(Continued from preceding page)

City	Motor Cars	Motor Trucks	Taxis or Jitneys	Buses	Total M. V.	Area Sq. MI.	Population
New Haven, Conn.....	23,778 <sup>a</sup>				23,778	22	172,000 <sup>a</sup>
New York, N. Y.....	380,058	100,413	30,739 <sup>a</sup>	...	511,210	300	6,251,817
Norfolk, Va.....	10,000	2,300	69	115	12,484	37	169,219
Oklahoma City, Okla....	30,000 <sup>a</sup>	2,000 <sup>a</sup>	93	20	32,113	17	145,000
Oakland, Cal.....	64,000	10,300	98	17	74,415	60	300,000
Peoria, Ill.....	12,000	1,400	40	10	13,450	10	94,395
Philadelphia, Pa.....	144,000 <sup>a</sup>	50,000	1,500	300	195,800	129	2,100,000
Portland, Maine.....	10,224	2,146	250	10	12,630	21	69,272
Portland, Ore.....	68,361 <sup>a</sup>	5,640 <sup>a</sup>	...	...	74,001	66	347,781
Racine, Wis.....	7,925	1,185	...	...	9,110	7	70,000
Reading, Pa.....	12,000	2,500	100	10	14,610	6	112,000
Richmond, Va.....	21,000	2,400	225	51	23,676	25	191,000
Roanoke, Va.....	8,000	2,000	...	26	10,026	10	65,000
Sacramento, Cal.....	30,065	5,487 <sup>a</sup>	...	...	35,552	14	101,982
Saginaw, Mich.....	15,150	2,400	20	17	17,587	17	72,281
Salt Lake City, Utah....	25,000 <sup>a</sup>	11,330	...	...	36,330	51	161,000
San Diego, Cal.....	45,200	6,400 <sup>a</sup>	...	...	51,600	78	140,000
San Francisco, Cal.....	94,453	19,226	...	...	113,679	42	715,000
Schenectady, N. Y.....	20,164	2,999	...	...	23,163	10	100,000
Scranton, Pa.....	18,000 <sup>a</sup>	6,000	50	12	24,062	20	150,000 <sup>a</sup>
Seattle, Wash.....	65,000	8,363	...	...	73,363	68	366,354
Sioux City, Iowa.....	14,700	1,400	80	25	16,205	45	85,000
South Bend, Ind.....	17,000	4,000	30	6	21,036	16	110,000
Spokane, Wash.....	28,742 <sup>a</sup>	...	50	40	28,832	40	125,064
Springfield, Mass.....	24,964	4,008	...	...	28,972	39	142,065
Topeka, Kansas.....	16,507 <sup>a</sup>	2,404 <sup>a</sup>	...	...	18,911	13	60,300
Tulsa, Okla.....	35,000	3,200	64	50	38,314	12	125,000
Utica, N. Y.....	19,000	3,400	500	50	22,950	25	109,000
Washington, D. C.....	88,343	13,302	1,182	265	103,092	70	438,000
Wheeling, W. Va.....	6,100	1,600	75	...	7,775	11	68,662
Wichita, Kans.....	19,000	1,800	60	50	20,910	25	92,016
Yonkers, N. Y.....	61,617	12,645	...	...	74,262	22	115,000
Youngstown, Ohio.....	25,000	3,500	90	140	28,730	...	160,000

<sup>1</sup>—Includes taxis, jitneys and buses.

<sup>2</sup>—Freight and passenger.

<sup>3</sup>—Includes trucks.

<sup>4</sup>—Estimated.

<sup>1</sup>—Includes trucks, taxis, jitneys and buses.

<sup>2</sup>—Includes taxis.

<sup>3</sup>—Includes buses.

<sup>4</sup>—County figures.

## Population Moving to Suburbs

*Trend Away from City Centers During Motor Age\**

Metropolitan Area of	1910			1920		
	City Proper	Suburban District	Percentage of Population in Suburbs	City Proper	Suburban District	Percentage of Population in Suburbs
Baltimore†.....	†558,485	†105,325	†16%	†733,826	†53,632	†7%
Boston.....	670,585	860,553	55%	748,040	1,024,194	58%
Chicago.....	2,185,283	270,659	11%	2,701,705	477,219	15%
Detroit.....	465,766	48,320	9%	993,678	171,475	15%
New York.....	4,766,833	1,799,976	27%	5,620,048	2,290,367	29%
Philadelphia.....	1,549,008	434,298	22%	1,823,779	583,453	27%
Pittsburgh.....	533,905	499,147	48%	588,343	619,161	51%
St. Louis.....	687,029	141,074	17%	722,897	179,115	18%
San Francisco and Oakland.....	567,086	119,787	17%	723,937	168,540	19%

\*—Table from *Journal of Land and Public Utility Economics* based on figures from *World Almanac*.

†—Changes made in extent of Baltimore's city limits invalidate any comparison.

## State Motor Vehicle Laws—1925

### **Motor Vehicle Conference Committee Formulates Sound and Equitable Principles that Should Underlie Legislation; and Strives Toward Uniformity**

During the year 1925 the Legislatures of 42 of the forty-eight states met in regular sessions. Approximately 2,400 bills, whose contents were directly or indirectly of serious concern to the production, sale and use of the motor vehicle, were introduced and considered by these legislatures. Over 500 of these bills were enacted into laws, and became effective during the year.

The subject matter of these laws relate to such important matters as:

1. **Special Taxation for Motor Vehicles, including gasoline taxation, increased registration fees, etc.**
2. **Restrictions on Motor Vehicle Operation, especially size, weight and speed limitations.**
3. **State Regulation of Motor Vehicles when used as Common Carriers.**
4. **Licensing of Operators.**
5. **Compulsory and Forbidden Equipment.**
6. **Compulsory Liability Insurance as a prerequisite to motor vehicle operation.**
7. **Certificate of Title—anti-theft.**
8. **Compulsory Stopping at Grade Crossings.**
9. **Traffic Regulations.**

Obviously, many measures dealing with these subjects are oftentimes based on prejudice, misinformation or lack of information. With a view, therefore, to placing at the disposal of law makers the facts involved, the Motor Vehicle Conference Committee has endeavored to gather information having a bearing upon some of the subjects enumerated and to formulate sound and equitable principles which, in its judgment, should underlie state laws dealing with them.

These principles have then been communicated to the law makers through the medium of Sub-Committees, which the parent body has created in each state of the Union. As a nucleus each state sub-committee contains representatives of the five component organizations constituting the main body, and in addition, representatives from state-wide organizations which in each state are directly or indirectly concerned in motor vehicle and highway legislation.

A noteworthy example of the manner in which the views of the Conference Committee have been laid first before its state sub-committees and by them before state lawmakers is the recommendation relating to special taxation for motor vehicles given on the next page.

*(Continued on next page)*

## Sound and Equitable Principles to Control Special Taxation for Motor Vehicles

(For Legislative Activities, 1925, see preceding page)

These principles, set out in a pamphlet entitled: "Special Taxation for Motor Vehicles," are as follows:—

1. The state should be the sole special taxing agency—Federal, County and Municipal Governments should be excluded from the field.
2. The motor vehicle tax should be simple in form and distributed in equitable and just proportion between the different types of motor vehicles.
3. No highway should be improved by expenditure of public funds in excess of its earning capacity. The return to the public in the form of economic transportation is the sole measure of the justification for the degree of improvement.
4. All money raised by such special taxes should be placed in the State Motor Vehicle Highway fund and to secure the best results should be expended under the direction of the State Highway Department.
5. The cost of building and maintaining adequate systems of highways should be distributed in an equitable relation to the benefits derived. These may be summarized as follows:
  - (a) Benefits to society in general, such as influence on education, recreation, health, fire prevention, police protection, the national defense, the postal service, living and distribution costs.
  - (b) Benefits to definite groups, such as agriculture, manufacture, labor, railroads, mining, forestry and waterways.
  - (c) Benefits to property served.
  - (d) Benefits to the road user.
6. For the purpose of apportioning costs in relation to benefits received, all highways may be divided into two classes, first, those used by the general motoring public; and second, those which perform a purely local service function.
7. Special motor vehicle taxes should be levied and used only for the improvement and maintenance of highways used by the general public, i. e., for general highway traffic flow lines.
8. The wide variance in valuations, tax burdens, number of motor vehicles in use and the status of highway development in the several states prevent the adoption of any fixed formula as to the proportion of the total costs of highways of general use which should be paid for from motor vehicle funds. Generally speaking, however, these principles may be set forth:
  - (a) In states where the income from motor vehicles is insufficient to meet all of the maintenance costs of highways of general motor use without undue burden to the individual motorist, such funds should be applied first to the maintenance of inter-state and state highway systems.
  - (b) In states where the income from motor vehicles is sufficient to meet all maintenance costs of highways of general motor use without undue burden to the individual motorist, any surplus should be used for this class of highway reconstruction and administration costs.
  - (c) In states where the number of motor vehicles will bring in large sums in excess of maintenance without placing undue burdens upon the individual motorist, such surplus should be used to defray all the costs of maintenance and a substantial share of all of the other costs of highways of general motor use.
  - (d) In those states where the motor vehicle income is more than sufficient to meet maintenance costs of highways of general motor use without undue burden to the individual motorist, it may be found advisable to use such surplus for the purpose of defraying all or part of the costs of bond issues to expedite construction of economically desirable motor highways.
9. Roads of a purely local interest, serving only local needs, should be financed out of local revenues obtained from local general taxes. Special assessments on adjoining land to defray a portion of the costs of such roads may be justified.
10. Where extraordinary improvements are undertaken in the vicinity of or serving congested areas of population the increment, if any, in property valuation following the improvement should be drawn upon to defray an equitable portion of the cost.
11. Irrespective of the particular form of special tax of the motor vehicle, whether registration fees or motor fuel taxes, the aggregate amount of these taxes in any one year should not be so great as to impose an undue burden on the individual motorist.

(See following page)

## Five Legislative Pamphlets

Five pamphlets on motor vehicle legislation and regulations have been published by, and may be obtained without charge from, the:

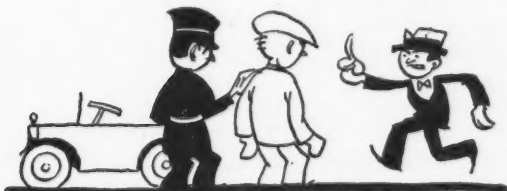
**Motor Vehicle Conference Committee**  
366 Madison Avenue, New York City

These booklets are:

1. **Special Taxation for Motor Vehicles.**  
Containing digest of state motor vehicle laws, and sound and equitable principles which should underlie such laws.
2. **Governmental Regulation of Motor Vehicle Common Carriers.**  
Containing digest of existing regulations, and sound and equitable principles which should be the basis for such regulations.
3. **Governmental Restrictions on Motor Vehicle Sizes, Weights and Speeds.**  
Containing existing restrictions in the different states, and recommended restrictions.
4. **Compulsory Automobile Liability Insurance.**  
Setting forth the views of the Motor Vehicle Conference Committee on this subject.
5. **Motor Vehicle Electric Lighting Laws.**  
Giving a digest of the State laws on the subject.

## Better Recovery of Stolen Cars

*(Figures compiled from records of 28 major cities by  
National Automobile Dealers Association)*



Year	Total Stolen No.	Not Recovered No.	%	Re- covered %	Year	Total Stolen No.	Not Recovered No.	%	Re- covered %
1918.....	27,443	5,772	21	79	1922....	35,334	8,094	23	77
1919.....	33,508	8,768	26	74	1923....	39,612	7,228	18	82
1920.....	30,046	8,778	29	71	1924.....	57,331	9,847	17	83
1921.....	37,554	11,037	29	71	1925.....	77,174	10,754	14	86



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(Continued on following page)

# **Organization of National Automobile Chamber of Commerce, Inc.**

(Continued from preceding page)

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Cadillac.....	Cadillac Motor Car Company.....	Detroit, Mich.
Case.....	J. I. Case T. M. Company.....	Racine, Wis.
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Kissel.....	Kissel Motor Car Company.....	Hartford, Wis.
Kleiber.....	Kleiber Motor Truck Company.....	San Francisco, Cal.
Lexington.....	Lexington Motor Company.....	Connersville, Ind.
Lincoln.....	Lincoln Motor Company.....	Detroit, Mich.
Locomobile.....	Locomobile Company of America.....	Bridgeport, Conn.
McFarlan.....	McFarlan Motor Corporation.....	Connersville, Ind.
Marmon.....	Marmon Motor Car Company.....	Indianapolis, Ind.
Mercer.....	Mercer Motor Car Company.....	Trenton, N. J.
Moon.....	Moon Motor Car Company.....	St. Louis, Mo.
Nash.....	Nash Motors Company.....	Kenosha, Wis.
Oakland.....	Oakland Motor Car Company.....	Pontiac, Mich.
Oldsmobile.....	Olds Motor Works.....	Lansing, Mich.
Overland.....	Willys-Overland Company.....	Toledo, Ohio
Packard.....	Packard Motor Car Company.....	Detroit, Mich.
Paige.....	Paige-Detroit Motor Car Company.....	Detroit, Mich.
Peerless.....	Peerless Motor Car Corporation.....	Cleveland, Ohio
Pierce-Arrow.....	Pierce-Arrow Motor Car Company.....	Buffalo, N. Y.
Reo.....	Reo Motor Car Company.....	Lansing, Mich.
Rickenbacker.....	Rickenbacker Motor Company.....	Detroit, Mich.
Roamer.....	Roamer Motor Car Company.....	Kalamazoo, Mich.
Star.....	Durant Motor Co. of N. J.....	Elizabeth, N. J.
Stearns-Knight.....	F. B. Stearns Company.....	Cleveland, Ohio
Studebaker.....	Studebaker Corporation.....	South Bend, Ind.
Stutz.....	Stutz Motor Car Co. of America.....	Indianapolis, Ind.
Velie.....	Velie Motors Corporation.....	Moline, Ill.
Wills Saint Claire.....	Wills Sainte Claire Company.....	Marysville, Mich.
Willys-Knight.....	Willys-Overland Company.....	Toledo, Ohio

# Chamber of Commerce, Inc.

## TAXICAB MANUFACTURERS

Trade Name	Member	Address
Checker.....	Checker Cab Mfg. Corp.....	Kalamazoo, Mich.
Dodge.....	Dodge Brothers, Inc.....	Detroit, Mich.
Elcar.....	Elcar Motor Company.....	Elkhart, Ind.
H. C. S.....	H. C. S. Cab Mfg. Company.....	Indianapolis, Ind.
Larrabee-Deyo.....	Larrabee-Deyo Motor Truck Co.....	Binghamton, N. Y.
Moon.....	Moon Motor Car Company.....	St. Louis, Mo.
Oakland.....	Oakland Motor Car Company.....	Pontiac, Mich.
Peerless.....	Peerless Motor Car Corporation.....	Cleveland, Ohio
Pennant.....	Roamer Motor Car Company.....	Kalamazoo, Mich.
Premier.....	Premier Motors, Inc.....	Indianapolis, Ind.
Reo.....	Reo Motor Car Company.....	Lansing, Mich.
Willys-Knight.....	Willys-Overland Company.....	Toledo, Ohio
Yellow Cab.....	Yellow Truck & Coach Mfg. Co.....	Chicago, Ill.

## MOTOR TRUCK MANUFACTURERS

Trade Name	Member	Address
Acme.....	Acme Motor Truck Company.....	Cadillac, Mich.
American-La France.....	American La France Fire Engine Co.....	Elmira, N. Y.
Atterbury.....	Atterbury Motor Car Company.....	Buffalo, N. Y.
Autocar.....	Autocar Company.....	Ardmore, Pa.
Chevrolet.....	Chevrolet Motor Company.....	Detroit, Mich.
Chrysler.....	Chrysler Corporation.....	Detroit, Mich.
Commerce.....	Commerce Motor Truck Company.....	Ypsilanti, Mich.
Commercial.....	Commercial Truck Company.....	Philadelphia, Pa.
Corbitt.....	Corbitt Motor Truck Company.....	Henderson, N. C.
Cunningham.....	Jas. Cunningham Son & Company.....	Rochester, N. Y.
Denby.....	Denby Motor Truck Corporation.....	Detroit, Mich.
Diamond T.....	Diamond T Motor Car Company.....	Chicago, Ill.
Dorris.....	Dorris Motor Car Company.....	St. Louis, Mo.
Duplex.....	Duplex Truck Company.....	Lansing, Mich.
Federal.....	Federal Motor Truck Company.....	Detroit, Mich.
Garford.....	Garford Motor Truck Company.....	Lima, Ohio
G. M. C.....	General Motors Truck Company.....	Pontiac, Mich.
Graham.....	Graham Brothers.....	Evansville, Ind.
Gray.....	Gray Manufacturing Company.....	Detroit, Mich.
H. C. S.....	H. C. S. Cab Mfg. Company.....	Indianapolis, Ind.
International.....	International Harvester Company.....	Chicago, Ill.
Kelly-Springfield.....	American Bus & Truck Company.....	Springfield, Ohio
Kissel.....	Kissel Motor Car Company.....	Hartford, Wis.
Kleiber.....	Kleiber Motor Truck Company.....	San Francisco, Cal.
Larrabee-Deyo.....	Larrabee-Deyo Motor Truck Co.....	Binghamton, N. Y.
Locomobile.....	Locomobile Company of America.....	Bridgeport, Conn.
Maccar.....	Maccar Truck Company.....	Scranton, Pa.
Mack.....	Mack Brothers Motor Car Co.....	New York, N. Y.
Moreland.....	Moreland Motor Truck Company.....	Los Angeles, Cal.
Nash.....	Nash Motors Company.....	Kenosha, Wis.
Overland.....	Willys-Overland Company.....	Toledo, Ohio
Pierce-Arrow.....	Pierce Arrow-Motor Car Company.....	Buffalo, N. Y.
Reo.....	Reo Motor Car Company.....	Lansing, Mich.
Republic.....	Republic Motor Truck Company.....	Alma, Mich.

(Membership list continued on following page)

## Motor Truck Manufacturers—Continued

(Membership list continued from preceding page)

Trade Name	Member	Address
Sanford.....	Sanford Motor Truck Company.....	Syracuse, N. Y.
Schacht.....	G. A. Schacht Motor Truck Co.....	Cincinnati, Ohio
Selden.....	Selden Truck Corporation.....	Rochester, N. Y.
Service.....	Service Motors, Inc.....	Wabash, Ind.
Standard.....	Standard Motor Truck Company.....	Detroit, Mich.
Sterling.....	Sterling Motor Truck Company.....	Milwaukee, Wis.
Stewart.....	Stewart Motor Corporation.....	Buffalo, N. Y.
Walker.....	Walker Vehicle Co.....	Chicago, Ill.
Walter.....	Walter Motor Truck Company.....	New York, N. Y.
Ward.....	Ward Motor Vehicle Company.....	Mt. Vernon, N. Y.
White.....	White Motor Company.....	Cleveland, Ohio
Yellow.....	Yellow Truck & Coach Mfg. Co.....	Chicago, Ill.

## MOTOR BUS MANUFACTURERS

Trade Name	Member	Address
Acme.....	Acme Motor Truck Company.....	Cadillac, Mich.
American La France.....	American LaFrance Fire Engine Co.....	Elmira, N. Y.
Atterbury.....	Atterbury Motor Car Company.....	Buffalo, N. Y.
Cadillac.....	Cadillac Motor Car Company.....	Detroit, Mich.
Commerce.....	Commerce Motor Truck Company.....	Ypsilanti, Mich.
Corbitt.....	Corbitt Motor Truck Company.....	Henderson, N. C.
Denby.....	Denby Motor Truck Corporation.....	Detroit, Mich.
Dorris.....	Dorris Motor Car Company.....	St. Louis, Mo.
Federal.....	Federal Motor Truck Company.....	Detroit, Mich.
Garford.....	Garford Motor Truck Company.....	Lima, Ohio
Graham.....	Graham Brothers.....	Evansville, Ind.
International.....	International Harvester Company.....	Chicago, Ill.
Kelly-Springfield.....	American Bus & Truck Co.....	Springfield, Ohio
Kissel.....	Kissel Motor Car Company.....	Hartford, Wis.
Larrabee-Deyo.....	Larrabee-Deyo Motor Truck Co.....	Binghamton, N. Y.
Maccar.....	Maccar Truck Company.....	Scranton, Pa.
Mack.....	Mack Brothers Motor Car Co.....	New York, N. Y.
Moreland.....	Moreland Motor Truck Company.....	Los Angeles, Cal.
Pierce-Arrow.....	Pierce-Arrow Motor Car Company.....	Buffalo, N. Y.
Reo.....	Reo Motor Car Company.....	Lansing, Mich.
Republic.....	Republic Motor Truck Company.....	Alma, Mich.
Sanford.....	Sanford Motor Truck Company.....	Syracuse, N. Y.
Schacht.....	G. A. Schacht Motor Truck Company.....	Cincinnati, Ohio
Selden.....	Selden Truck Corp.....	Rochester, N. Y.
Service.....	Service Motors, Inc.....	Wabash, Ind.
Standard.....	Standard Motor Truck Company.....	Detroit, Mich.
Sterling.....	Sterling Motor Truck Company.....	Milwaukee, Wis.
Stewart.....	Stewart Motor Corporation.....	Buffalo, N. Y.
Studebaker.....	Studebaker Corporation.....	South Bend, Ind.
White.....	White Motor Company.....	Cleveland, Ohio
Yellow.....	Yellow Truck & Coach Mfg. Co.....	Chicago, Ill.

## AMBULANCE AND FUNERAL VEHICLE MANUFACTURERS

Trade Name	Member	Address
Cunningham.....	Jas. Cunningham Son & Company.....	Rochester, N. Y.
Sayers.....	Sayers & Scoville Company.....	Cincinnati, Ohio

## Associations of the Automobile Industry

### National Automobile Chamber of Commerce

GENERAL OFFICES: Marlin - Rockwell Building, 366 Madison Avenue, at 46th Street, New York, N. Y.

PRESIDENT: Charles Clifton, Chairman of the Board of Pierce-Arrow Motor Car Company, Buffalo, N. Y.

GENERAL MANAGER: Alfred Reeves.

The National Automobile Chamber of Commerce is the successor of the National Association of Automobile Manufacturers, organized in November, 1900, and of the Automobile Board of Trade.

OBJECT: To serve as a clearing house of research and information on subjects concerning motor transportation, and to represent the automobile industry in all matters where co-operative effort is proper, efficient, and economical.

Its purposes may be illustrated by listing some of its current activities, which are directed by the committee members:

Cross-licenses more than 700 patents.

Manages New York and Chicago National Automobile Shows.

Compiles and issues figures on automobile production.

Holds World Motor Transport Congresses.

Studies railroad rates, and handles freight claims for members; appears in rate cases for automobile industry.

Publishes "Handbook of Automobiles" and "Facts and Figures of the Automobile Industry."

Conducts Regional Motor Transport Conferences.

Advocates improved highways located according to economical needs and properly financed.

Collects data on volume of traffic and causes of accidents, campaigns for improvements, and offers more than 500 prizes annually to school teachers and children for the best lessons and essays on traffic and safety.

Sends representatives to motor transportation meetings abroad.

Acts as contact for the automobile industry with insurance rate makers.

Promotes development of motor car, motor truck, motor bus, and taxicab transportation.

Acts as clearing house for policies affecting foreign trade.

Studies relationship of automobile to other industries.

Holds Automotive Equipment Show and Service Conventions to develop more efficient and economical repair shop practices.

Advocates sound and equitable legislative principles.

Conducts Advertising Conventions for exchange of views in lowering overhead costs.

Studies the place of motor transportation in the general economic status.

Number of members making passenger cars, 51; making motor trucks, 45; making taxicabs, 13 and making buses, 31.

### Motor and Accessory Manufacturers Association

GENERAL OFFICES: Fisk Building, 250 West 57th Street, New York

BRANCH OFFICE: Credit Department, First National Bank Building, Detroit, Mich.

PRESIDENT: H. L. Horning, Waukesha Motor Co., Waukesha, Wis.

GENERAL MANAGER: M. L. Heminway. National organization representing interests of automotive parts accessories and equipment manufacturers. Association has automobile show, credit, educational, merchandising, export, legislation, and traffic departments. Field secretaries have been appointed to keep in direct touch with members.

### Rubber Association of America

GENERAL OFFICES: 250 West 57th St., New York City.

PRESIDENT: J. C. Weston.

SECRETARY AND GENERAL MANAGER: A. L. Viles.

A national trade organization embracing rubber manufacturers, importers, brokers and dealers in crude rubber, reclaimers and supply manufacturers of the United States and Canada.

Its membership consists of 296 firms, and its object is to promote in all lawful ways the commercial interests of its members, and secure the advantages to be obtained through mutual co-operation, also to stimulate social intercourse among those connected with the rubber industry and commerce and in general for the promotion of the welfare of the rubber industry.

Its work is largely carried on through

*(Continued on following page)*



## Associations of the Automobile Industry—(Continued)

the media of "Divisions" or "Committees" constituted of the members of the Association engaged in a particular branch of the rubber industry.

### American Automobile Association

NATIONAL HEADQUARTERS: Pennsylvania Ave. at 17th St., N. W., Washington, D. C.

PRESIDENT: Thos. P. Henry, Marquette Bldg., Detroit, Mich.

TREASURER: Kane S. Green, 23 S. 23rd St., Philadelphia, Pa.

SECRETARY: Charles C. Janes, Southern Hotel, Columbus, Ohio.

GENERAL MANAGER: Ernest N. Smith, Washington, D. C.

The A. A. A. was organized in Chicago in March, 1902. It is now the world's largest motor federation—composed of 780 motor clubs throughout the country and approximately 800,000 members. It is a national civic body, operating without personal profit and officered by responsible business and professional men.

OBJECTS: Its objects, briefly stated, are:

To unite in one body all the automobile clubs and individual motorists in the country.

To secure reasonable and just legislation and to aid in proper enforcement of automobile laws and ordinances.

To obtain local, state and federal aid in the construction and maintenance of good roads.

To encourage road travel and transportation, and to secure, prepare, and disseminate information relative thereto.

To support sportsmanlike contests and other movements that will advance motor-ing interests.

To develop service to motorists through clubs.

#### BUS DIVISION

CHAIRMAN: A. N. Hill, Charleston, West Virginia.

VICE-CHAIRMAN: George P. McCallum, 510 Penobscot Building, Detroit, Mich.

SECRETARY: John M. Meighan, Washington, D. C.

Formal organization of the Bus Division of the A. A. A. was completed at Washington on March 19, 1926, with 15 state and regional bus associations as charter members. This Division was established to care for the interests of the owners and operators of motor buses throughout the United States and has its own officers to handle matters pertaining solely to motor bus use.

### National Automobile Dealers' Association

GENERAL OFFICES: 320 North Grand Avenue, St. Louis, Mo.

PRESIDENT: C. B. Warren, New York, N. Y.

SECRETARY AND GENERAL MANAGER: C. A. Vane.

OBJECT is promotion of automobile dealer business, constructive publicity on dealer aims, maintenance of high merchandising standards, research on the magnitude of the business, study of markets and dissemination of facts concerning the same, opposition to harmful legislation, support of good legislation, promotion of good roads.

### Society of Automotive Engineers

GENERAL OFFICES: 29 West 39th St., New York City.

PRESIDENT: T. J. Litle, Jr., Detroit, Mich.

SECRETARY AND GENERAL MANAGER: Coker F. Clarkson.

OBJECT of the Society is to promote the arts, sciences, standards, and engineering practices connected with the design, construction and utilization of automotive apparatus, of all forms of self-propelled or mechanically propelled mediums for the transportation of passengers or freight, and internal combustion prime-movers. Publications are: *Transactions* (semi-annual), *Year Book*, *The Journal* (monthly), and *S. A. E. Handbook*, including *Standards and Recommended Practices* (revised semi-annually). About 500 distinct mechanical and material standards, specifications, mounting dimensions of parts and accessories have been established by S. A. E. Membership over 5,500.

### Motor Vehicle Conference Committee

OFFICES: Room 1408, Marlin-Rockwell Building, 366 Madison Avenue at 46th Street, New York City.

CHAIRMAN: D. C. Fenner.

SECRETARY: Russell Huffman.

The Motor Vehicle Conference Committee, organized in 1919, is composed of representatives from the following organizations: American Automobile Association, Motor and Accessory Manufacturers Association, National Automobile Cham-

(Continued on following page)



## Associations of the Automobile Industry—(Continued)

ber of Commerce, National Automobile Dealers Association, and the Rubber Association of America.

This committee acts as a clearing house for the legislative problems, which, in increasing numbers are confronting the individual members of its component organizations.

### National Association of Finance Companies

GENERAL OFFICES: First National Bank, Building, 33 S. Clark St., Chicago, Ill.

PRESIDENT: A. E. Brooker, St. Louis, Mo.

SECRETARY AND GENERAL MANAGER: C. C. Hanch.

OBJECT: Coordination of forces for educational, legislative, and other purposes, generally cooperative with allied interests. A national organization representing automotive financing and insuring interests along the following lines: Advocates credit terms on a safe basis. Opposes vicious state and national legislation and promotes desirable state and national legislation. Distributes valuable data in the shape of educational, legal, statistical, and production bulletins and briefs. Secures material reduction in cost of essential services used by members. Arranges for interchange of service between members in collection and credit work and location of embezzlers of motor vehicles.

### National Standard Parts Association

GENERAL OFFICES: Hofman Building, 2539 Woodward Avenue, Detroit, Mich.

PRESIDENT: Chas. W. Moffett, Barney's Auto Parts Co., Inc., New York City.

FIRST VICE-PRESIDENT: W. M. Albaugh, Thompson Products, Inc., Cleveland, O.

EXECUTIVE VICE-PRESIDENT: E. P. Chalfant, 310 Hofman Building, Detroit, Mich.

ASSISTANT MANAGER: Robert Macfee.

Membership comprises corporations, firms or persons engaged in manufacturing and of jobbing standard brands of automotive replacement parts or of garage equipment and tools.

OBJECTS: The objects of the Association are to promote an enlarged acquaintance and a more friendly intercourse among its members, and in all reasonable, lawful and proper ways to promote the best interests of the Automotive Replacement Parts trade.

### Automotive Equipment Association

GENERAL OFFICES: 18th Floor, City Hall Square Building, Chicago, Ill.

PRESIDENT: N. F. Ozburn, Memphis, Tenn.

EXECUTIVE CHAIRMAN: Wm. M. Webster, Chicago, Ill.

The organization is international in its scope.

OBJECT: To promote and create a friendly and harmonious relation between manufacturers, jobbers, dealers and garage men and all organized effort incident to or connected with the Automotive Industry, including automobiles, trucks, tractors, air motors, etc.; to encourage legislation, local, State and National, in the advancement of the automotive interests; for the making of better roads; to collect, collate and disseminate information of interest to the trade generally.

### Automobile Body Builders Association

GENERAL OFFICES: 1819 Broadway at 59th Street, New York.

PRESIDENT: W. R. Laidlaw, The Laidlaw Co., Inc., New York, N. Y.

SECRETARY-TREASURER: Frederick D. Mitchell.

A National Association composed of Automobile Body Builders and makers of automobile body materials and parts, and plant tools and supplies.

### National Ass'n. of Taxicab Owners

HEADQUARTERS: 500 North Dearborn Street, Chicago, Ill.

PRESIDENT: W. W. Cloud, Baltimore, Md.

VICE-PRESIDENT: Russell Reel, Des Moines, Iowa.

TREASURER: W. E. McGuirk, New York, N. Y.

SECRETARY: J. G. Williams, Chicago, Ill.

### Trailer Mfgs. Ass'n. of America

HEADQUARTERS: 393 Seventh Avenue, New York City.

PRESIDENT: H. C. Fruehauf.

FIRST VICE-PRESIDENT: S. A. Griggs.

SECOND VICE-PRESIDENT: H. W. Raymond.

SECRETARY - TREASURER: Henry M. Wood.

MANAGER: Allan P. Ames.

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